RAILROAD

OCTOBER MAGAZINE 35 CENTS

IN THIS ISSUE **MACKINAW DIVISION** NEW YORK CENTRAL'S NORTHWOODS BRANCH

20 TOP TUNES $2.98

LESS THAN 15¢ A SELECTION!

YOU SAVE $14.82

NOW AVAILABLE—FOR THE FIRST TIME AT THE MOST SENSATIONAL MONEY SAVING PRICE OF ONLY $2.98 . . . the 20 TOP HITS that are being whistled and sung all over America. These Records, bought separately in the stores would cost you up to $17.80. You can choose from packages of Hit Parade songs . . . Hill Billy favorites . . . or the most loved Hymns.

Each package contains a full hour of musical enjoyment. They are ***all brand new*** and each record plays twice as many songs as regular records, containing ***four complete 3-minute selections per record.*** They are break-resistant and will play on any standard type 78 rpm phonograph. For those with 45 rpm changers, special packages of 45's are also available.

THE BIGGEST PHONOGRAPH RECORD BUY IN TOWN!

We urge you to fill in and mail Coupon NOW! Play these 20 selections for 10 days in your own home. If you are not delighted, return within 10 days for FULL REFUND.

CANADIAN READERS!

This offer is also available to you in Canada on 78 rpm only. Address: Top Tunes, Dept. J, 198 Wellesley St. East, Toronto 5, Ontario

DON'T DELAY! RUSH YOUR ORDER for your favorite GROUP NOW!

20 HIT PARADE TUNES

Anytime
Tell Me Why
Cry
Here Am I Broken Hearted
Please Mr. Sun
I'll Walk Alone
Perfidia
Wheel of Fortune
A Guy Is a Guy
I Wanna Love You
Kiss of Fire
Blacksmith Blues
Pittsburgh, Pa.
Blue Tango
Forgive Me
Gandy-Dancers Ball
Trust in Me
Tulips and Heather
Stolen Love
The Little White Cloud That Cried

20 HILL BILLY TUNES

Heart Strings
Alabama Jubilee
How Long Will It Take
Crazy Heart
Always Late
Slow Poke
Hey Good Lookin'
I'll Still Want You
Mom and Dad's Waltz
I Don't Wanna Be Free
Travelin' Blues
Missing in Action
Music Makin' Mama From Memphis
Driftwood on the River
These Things Shall Pass
Give Me More and More
Baby We're Really in Love
Let Old Mother Nature Have Her Name
Somebody's Beatin' My Time
Too Old to Cut the Mustard

20 MOST LOVED HYMNS

Our Lady of Fatima
Onward Christian Soldiers
Abide With Me
Moonlight Madonna
Away in a Manger
The Bell
Adeste Fideles
Noel
Good King Wenceslas
Serenata
Ave Maria
The Lord's Prayer
The Bells of St. Mary
The Rosary
Deck the Hall With Boughs of Holly
These Things Shall Pass
Songs My Mother Taught Me
Little Town of Bethlehem
Silent Night
Spirit of Christmas

IMPORTANT—These Tunes are kept constantly up to date—only the latest and most popular hits are kept on the list.

MAIL COUPON NOW—10-DAY TRIAL OFFER

TOP TUNES, Dept. T
79 Cambridge St., Boston, Mass.

Gentlemen: Please RUSH the 20 Top Selections on your NO-RISK 10-day money-back guarantee. I enclose $2.98 for each group of 20 selections with the understanding that if I am not completely satisfied you will return my money.

☐ 20 Hit Parade Tunes $2.98
☐ 20 Hymns $2.98
☐ 20 Hill Billy Hits... $2.98
☐ All 3 Groups of 60 Songs..... $7.95

Name.....
Address.....
City..... Zone..... State.....
☐ Check if for 45 rpm.

Amazing NEW WATCH with MECHANICAL BRAIN!

It "Remembers" Tells Time Tells Date

Date Changes AUTOMATICALLY EVERY DAY

Miracle Achievement of Famous SWISS Precision Watchmakers!

MATCHING EXPANSION BAND *Free* OF EXTRA COST

TIMES PLANES

TIMES SPORTS

TIMES SHOP WORK

TIMES LAB WORK

NOT AT THE $75 YOU'D EXPECT

Special Offer

$8.95 PLUS 90c FED TAX

Act Now AND SAVE!

WHAT A BUY!

WHAT A BUY! Now, for only $8.95 you can own a *lifetime Swiss timepiece* with features seldom found even in $75 watches. Our wholesale type merchandising makes it possible for us to bring you this **DIRECT SWISS IMPORT** at a fraction of its worth. Amaze your family and friends with the magic-like action of this **AUTOMATIC CALENDAR — STOPWATCH — CHRONOGRAPH — WRIST WATCH.** See the date change automatically every day. *Time races, sports, lab work, photography, etc.* And, yes, for gifts . . . no one will ever guess its modest cost. It's a perfect gift for every occasion: **BIRTHDAY, GRADUATION, ANNIVERSARY, CHRISTMAS** or any other holiday. If you've always wanted a *precision watch* but did not care to pay $75.00 or more, don't miss this offer. **ORDER TODAY** while supply lasts.

OVER 40 QUALITY FEATURES . . . Seldom Found Even In $75 Watches!

Imported Swiss Precision Movement. **GUARANTEED ACCURATE,** supremely dependable. **PUSH BUTTON START AND STOP. RED SWEEP SECOND HAND** for instant viewing. **Shatterproof crystal never needs replacing.** Triple chrome plated case **ALWAYS** looks brand new. Fully **SHOCK RESISTANT** and **ANTI-MAGNETIC** . . . electricity can't affect it! **Radium glow dial** for easy viewing at night. Unconditionally **GUARANTEED.** Complete how-to-use instructions included. All these features plus dozens more make this amazing timepiece **the buy of a lifetime.** Don't say later, "I'm sorry I missed out." **MAIL COUPON NOW** while offer lasts.

Unconditionally GUARANTEED FOR TWO YEARS!

LIFETIME SERVICE CERTIFICATE

You never pay one penny for the skilled repair service of our master craftsman. Parts excepted.

SEND NO MONEY!

Rush coupon for immediate delivery. Wear it 10 days without obligation. Supply is, of course, limited. Order today.

FREE

OF ADDED COST . . .

MATCHING METAL E-X-P-A-N-S-I-O-N WATCH BAND!

YOUNG PRODUCTS Dept. 469 2605 ELMHURST, DETROIT 6, MICH.

TRY 10 DAYS AT OUR RISK • RUSH COUPON

YOUNG PRODUCTS, DEPT. 469
2605 ELMHURST AVENUE DETROIT 6, MICHIGAN

Send . . . . . Chrono-Calendar watches at $8.95 plus 90c Fed. Tax each. I will deposit with Postman special low price plus postage. If I'm not delighted after 10 days, I may return watch for full refund of purchase price.

NAME _____

ADDRESS _____

CITY _____ STATE _____

☐ SAVE MORE — If you send cash, check, M. O. . . . WE PAY POSTAGE. Same moneyback guarantee.

RAILROAD

MAGAZINE

Originally Railroad Man's Magazine, founded 1906

October, 1952 Vol. 59, No. 1 35 Cents

Cover: *CPR Freight Diesel*
By: *Herb Mott*

ILLUSTRATED FEATURES

Mackinaw Division ..... *Fred C. Olds* 14
Sudan Railways ..... *A photo story* 36
Early Cab Signals ..... *W. M. Schnure* 48
Power Contactors ..... *Drawings by H. B. Comstock* 58
Canada's Streetcars ..... *John M. Mills and Steve Maguire* 76
Daily Except Sunday ..... *H. Reid* 112

TRUE TALES

Brownies off the Record ..... *Larry McCarty* 68
Not on the Timetable ..... *Harry Hiller* 92

FICTION

Trouble in the Canyon ..... *Charles W. Tyler* 104

SHORT HAULS

Working on the Railroad ..... *Eva Allen* 6
Along the Iron Pike ..... *Joe Easley* 34
Locomotives of the Detroit, Toledo & Ironton 98
Fiddletown & Copperopolis (No. 50) ..... *Carl Fallberg* 122

DEPARTMENTS

Information Booth ..... *Conducted by Alfred Comstock* 62
Carbarn Comment 88
On the Spot 120
Railroad Camera Club (Those Surprising Trips) 137

EDITOR: K. M. Campbell

ASSOCIATE EDITOR: Ted Sanchagrin **ART EDITOR: George H. Mabie**

ELECTRIC LINES: Stephen D. Maguire **ED. ASST.: Martha Sobolevitch**

Any resemblance between any character appearing in fictional matter, and any person, living or dead, is entirely coincidental and unintentional.

Published monthly by Popular Publications, Inc., at 1125 E. Vaile Ave., Kokomo, Indiana. Editorial and Executive Offices, 205 East 42nd Street, New York 17, N. Y. Henry Steeger, President. John J. McVarish, Treasurer. Entered as second-class matter at the Post Office at Kokomo, Indiana. Copyright, 1952, by Popular Publications, Inc. This issue is published simultaneously in the Dominion of Canada. Copyright under International Copyright Convention and Pan-American Copyright Conventions. All rights reserved, including the right of reproduction, in whole or in part, in any form. Title registered in U. S. Patent Office. Single copy, 35c. Annual subscription for U. S. A., its dependencies, and Canada, $3.50. Other countries, $1.00 additional. All correspondence relating to this publication should be addressed to 1125 East Vaile Ave., Kokomo, Indiana, or 205 East 42nd St., New York 17, N. Y. When submitting manuscripts, enclose stamped, self-addressed envelope for their return, if found unavailable. The publishers will exercise care in the handling of unsolicited manuscripts, but assume no responsibility for their return. Printed in the U. S. A.

Picture yourself going places

You've done it often. Call it day-dreaming if you like, but you've seen yourself in a bigger job — giving orders and making decisions — driving off in a smart new car — buying your family a fine home.

There's nothing wrong with dreams. But how about making them come true? *You can do it,* if you're willing to try!

Look around you. The men who are going places are the *trained* men. They've learned special skills that bring them better jobs and higher pay. It's the men *without* training whose dreams never come true.

What are you going to do about it? Just wait and wish? If you really *want to succeed,* you can get the training you need by studying at home in your spare time. International Correspondence Schools offer you a course in just about any field you choose, giving you the practical plus the bedrock facts and theory. No skimming or skimping! And you'll be earning while you learn. Students report better jobs and more pay within a few months.

Look over the list of subjects in the coupon below. Pick out the one that interests you most — the one that holds the greatest future for you. Then mark the coupon, and mail it today. *Find out* what I. C. S. can do for you. It costs only a stamp or postcard, but it's the first step if you want to go places!

SMARTEST THING HE EVER DID

"I noticed that the trained men held the better jobs. That's when I decided to take an I. C. S. course. Enrolling with I. C. S. was one of the smartest things I ever did. The position as Plant Engineer I hold today is largely due to the 'know-how' derived from my I. C. S. texts. I. C. S. can help any man who will study."

L. P. S., Elkhart, Ind.

DON'T let these poor excuses make you **FAIL**

1. I never got started.
2. I want a good time.
3. I don't want any responsibility.
4. I can't stick to it.
5. I haven't enough education.
6. I don't know where to get training.

GOING INTO THE ARMY OR NAVY?

Earn more pay, win a higher rating, quicker promotion by having this specialized knowledge and credit. I. C. S. courses have helped thousands advance in the services.

INTERNATIONAL CORRESPONDENCE SCHOOLS

ICS

BOX 3279-H, SCRANTON 9, PENNA.

☐ Please send information about I.C.S. employee training for companies.

Without cost or obligation, please send me the booklet about the course BEFORE which I have marked X:

ART
- ☐ Commercial Art
- ☐ Magazine and Book Illustrating
- ☐ Cartooning
- ☐ Show Card and Sign Lettering
- ☐ Fashion Illustrating

AUTOMOTIVE
- ☐ Automobile, Mechanic
- ☐ Auto-Elec. Technician
- ☐ Auto Body Rebuilding and Refinishing
- ☐ Diesel—Gas Engines

AVIATION
- ☐ Aeronautical Engineering Jr.
- ☐ Aircraft Engine Mechanic
- ☐ Airplane Drafting

BUILDING
- ☐ Architecture
- ☐ Arch. Drafting
- ☐ Building Contractor
- ☐ Estimating
- ☐ Carpenter and Mill Work
- ☐ Carpenter Foreman
- ☐ Reading Blueprints
- ☐ House Planning
- ☐ Plumbing
- ☐ Heating
- ☐ Steam Fitting
- ☐ Air Conditioning
- ☐ Electrician

BUSINESS
- ☐ Business Administration
- ☐ Certified Public Accountant
- ☐ Accounting
- ☐ Bookkeeping
- ☐ Stenography and Typing
- ☐ Secretarial
- ☐ Federal Tax
- ☐ Business Correspondence
- ☐ Personnel and Labor Relations
- ☐ Advertising
- ☐ Retail Business Management
- ☐ Managing Small Business
- ☐ Sales Management
- ☐ Salesmanship
- ☐ Traffic Management

CHEMISTRY
- ☐ Chemical Engineering
- ☐ Chemistry
- ☐ Analytical Chemistry
- ☐ Petroleum—Nat'l Gas
- ☐ Pulp and Paper Making
- ☐ Plastics

CIVIL, STRUCTURAL ENGINEERING
- ☐ Civil Engineering
- ☐ Structural Engineering
- ☐ Surveying and Mapping
- ☐ Structural Drafting
- ☐ Highway Engineering
- ☐ Reading Blueprints
- ☐ Concrete Construction
- ☐ Sanitary Engineering

DRAFTING
- ☐ Aircraft Drafting
- ☐ Architectural Drafting
- ☐ Electrical Drafting
- ☐ Mechanical Drafting
- ☐ Structural Drafting
- ☐ Sheet Metal Drafting
- ☐ Mine Surveying and Drafting

ELECTRICAL
- ☐ Electrical Engineering
- ☐ Electrician
- ☐ Electrical Maintenance
- ☐ Electrical Drafting
- ☐ Electric Power and Light
- ☐ Lineman

HIGH SCHOOL
- ☐ High School Subjects
- ☐ College Preparatory
- ☐ Mathematics
- ☐ Commercial
- ☐ Good English

MECHANICAL AND SHOP
- ☐ Mechanical Engineering
- ☐ Industrial Engineering
- ☐ Industrial Supervision
- ☐ Foremanship
- ☐ Mechanical Drafting
- ☐ Machine Design-Drafting
- ☐ Machine Shop Practice
- ☐ Tool Design
- ☐ Industrial Instrumentation
- ☐ Machine Shop Inspection
- ☐ Reading Blueprints
- ☐ Toolmaking
- ☐ Gas—Electric Welding
- ☐ Heat Treatment—Metallurgy
- ☐ Sheet Metal Work
- ☐ Sheet Metal Pattern Drafting
- ☐ Refrigeration

POWER
- ☐ Combustion Engineering
- ☐ Diesel—Electric
- ☐ Electric Light and Power
- ☐ Stationary Steam Engineering
- ☐ Stationary Fireman

RADIO, TELEVISION, COMMUNICATIONS
- ☐ General Radio
- ☐ Radio Operation
- ☐ Radio Servicing—FM
- ☐ Television
- ☐ Electronics
- ☐ Telephone Work

RAILROAD
- ☐ Locomotive Engineer
- ☐ Diesel Locomotive
- ☐ Air Brakes ☐ Car Inspector
- ☐ Railroad Administration

TEXTILE
- ☐ Textile Engineering
- ☐ Cotton Manufacture
- ☐ Rayon Manufacture
- ☐ Woolen Manufacture
- ☐ Loom Fixing
- ☐ Finishing and Dyeing
- ☐ Textile Designing

HOME ARTS
- ☐ Dressmaking and Designing
- ☐ Cookery
- ☐ Tea Room Management

Name_____ Age_____ Home Address_____

City_____ State_____ Working Hours_____ A.M. to_____ P.M.

Occupation_____

Special tuition rates to members of the Armed Forces. Canadian residents send coupon to International Correspondence Schools Canadian, Ltd., Montreal, Canada.

Working on the Railroad

EVA ALLEN

BUT NOT to pass the time of day. I've been in it seven years for the money. Nothing else could drag me into such a bewildering life for a woman. During the last war that we openly called war, the Seaboard Railway was desperately sending out pleas for telegraph operators. I was faced with the job of supporting three children: a son and daughter in late high school and a little pig-tailed five-year old.

I gnawed my finger nails and walked back and forth like Felix the Cat for days —should I try it? I was 36 years old and for years had been strictly a housewife with nothing more mentally stimulating than setting up curtain stretchers or sewing a seam you couldn't see with the naked eye. I had been to college. I could type. I had been a bookkeeper in my day. I taught a nice Sunday School class.

It was not enough. The local operators frankly told me I was too old to learn to telegraph, that only youngsters could pick it up. But that demand and the rate of pay? The most urgent demand was right in my own home. Somehow, the son and daughter must go away to school. Wasn't my son an outstanding Eagle Scout and didn't he win an essay contest and talk over the radio? Wasn't my long-legged daughter standing at the head of her class? But the men operators kept insisting it wasn't sensible for me to try to join their ranks. They said a woman who presided at the punch bowl and served open-faced sandwiches at the Woman's Club could never fight the extra board. They said I couldn't check cars down in the yard at night. My children would run wild. I'd lose my religion. I wouldn't be respected as a lady.

I walked some more. Then I visited the operator stationed in our little town and gave him the once over. His nose was large, his eyes small. He interrupted me to say, "Dispatcher BR". He shouted insolently into the city phone, "No, No, I told you once we wouldn't have any high-side gond's today." His stomach hid his belt and his ears stuck out like they were braced. When he told me rudely that the work would be beyond my capacity I asked him for a copy of the Morse code.

After tucking the baby in that night I started my lesson in railroading at the dining-room table. Hard? Shucks, nothing to it. "A" was dot-dash. "B" was dash-three dots. Memory work was easy for me. At missionary meetings I had often spoken of the suffering Chinese, without notes. I could hardly wait for the next day so I could borrow a practice set and just show Mr. Know-it-all.

Then came the awakening. I sat for hours, days, weeks, months. The young men began training with me in the back of the warehouse with an infrequent visit from our teacher, the busy agent. We would take turns and peck out a word for the others to guess. Invariably we would say, "What is this?" and then follow up with the name of our home town. One boy was from West Florida and no matter what he sent I would guess, "Hosford." Usually I was right. Their minds and wrists were so limber that they were soon ahead of me. Nothing but financial desperation kept me at it. I felt almost as bright as a chimpanzee and simply could not tell the difference in the click that closed the key and the one that meant an extra dot.

My morale could be raised only by going home and whipping up a feathery

No Question About it...

Lee is your best value in Work Clothes!

America's Best-Made, Best-Known Work Clothes

Union Made. Buy them at leading retail stores coast to coast.

COPYRIGHT, 1952
THE H. D. LEE CO.

angel food cake. The men were so smug and were positive that if I wore trousers and had a crew cut it would all come to me as easy as pie. Well, I'd just hire out somewhere else. I could teach, but three weeks substituting in the sixth grade had cured me of that for all time. I had an opportunity to be a bank teller but women who had been there 18 years were getting only $50 a week. I could clerk in a store or maybe cook in the PTA lunchroom. I could keep books but at only $40 or so a week. No, I would be a telegraph operator.

AT LAST came the big day. I was going into the city to take my examination. If I had been going straight into the lion's den with Daniel I couldn't have been more afraid. I had thought my neat little dark dress would do the trick, but facing the Chief Dispatcher was worse than taking the marriage vows. But, oh joy, the wire test was simple. (Lord, just give us operators with a name and two legs.) When he asked me, "H-o-w a-r-e y-o-u DN," I felt like an old veteran of the rails as I answered, "J-u-s-t f-i-n-e t-h-a-n-k-s." A veteran would have abbreviated and said, "OK Tnx," but I didn't know it at that time. The Chief Surgeon said I was all right, being able to hear a watch tick as it rested against my ear lobe and to read black ABCs six inches high. Praise the Lord, I was hired. I was a telegraph operator.

Well, not quite. My first yellow message read, "Protect first trick DE one day only Mar 1st acknowledge." You use no punctuation in our line of work except periods and question marks—I mostly use the latter. I started out fine, cutting in my phones and wire, and remembering to copy the 8 o'clock line-up. Not bad. I was feeling thankful I was on the low rail with only freights when I was reminded that the circus trains, in sections, would be on our line that day.

Tigers? Giraffes? Gnus? What fun! But, wait a minute, that meant BLOCKING the trains. What did the book say? What did the agent tell me? I saw us all wrecked in one sad scramble of animals and trapeze artists. When I copied the first train order, the stylus tore the thin tissue paper. I listened for my station call like you would listen for the hiss of a rattler—DE, DE, DE, DE and signed KS. The circus train was on its way, going north to be a harbinger of spring. Or was it? I checked my orders, the Dispatcher checked them (you can bet), cleared them and I put them in the hoop —that diabolical device invented by Satan. What if the orders were wrong? Out they came. In they went. Out they came. The train blew, its death rattle I was sure, and in they went again. A mistake, that was a Coast Line train.

I went out and put my ear to the rail like an Indian scout. He was coming. Say a prayer, "May the Lord watch between me and thee while we are absent one from the other." No, that won't do. I stepped off the distance of the hoop from the rail, took my stance and he was there. He got it!! Why, I was good. There were autos passing along the highway and I was sure the occupants were admiring how cleverly I had done it. I waved to the elephants and their water boys—and missed the rear end!

SO IT WAS for years. Just as I decided I was a real operator my feathers would drag the dust. The children learned to take one look at me and know whether the dispatcher had called me a "Jenny" or had said very respectfully, "Operator."

I felt it so unfair to have to compete with young men with nothing more to do on their off hours than to snuggle up to their blondes, or with the older men who had devoted wives at home to light their pipes for them as they pushed back from the supper table. I had them skinned a mile, though, when it came to doing a dozen things at one time. I had been making biscuit for years as the kids poked their fingers in the dough and each rolled out a coffee can lidful for themselves. I could broil a steak, answer the phone, toss up a salad and keep the baby out of the pot lids at the same time. This

$100.00 A WEEK in CASH
PAID DIRECT TO YOU

FAMILY HOSPITAL PLAN

SAVE MONEY!
There's a big advantage to buying this policy by mail. This method of selling is less costly for us—and that's another reason why we are able to offer so much protection for so little money.

Policy Pays for a Day, a Week, a Month, a Year—*just as long as necessary for you to be hospitalized!*

JUST LOOK
The Large Benefit This Low Cost Policy Provides!

This remarkable Family Hospital Policy covers you and your family for about everything—for *every* kind of accident—and for *all* the common and rare diseases, and there are thousands of them. Serious diseases such as cancer, tuberculosis, heart diseases, diseases involving female organs, and abdominal operations are also fully covered after this policy is in force six months. Suicide, insanity, and venereal diseases are understandably excluded.

The money is all yours—for any purpose you want to use it. There are no hidden meanings or big words in the policy. It is the kind of protection that will stand by you when emergency comes. We urge you and every family and also individuals to send for this policy on our 10 day free trial offer—and be convinced that no other hospital plan offers you so much for your $1.00 a month!

TWO SPECIAL FEATURES

MATERNITY
Benefits At Small Extra Cost
Women who will some day have babies will want to take advantage of a special low cost maternity rider. Pays $50.00 for childbirth confinement either in the hospital or at home, after policy has been in force 10 months. Double the amount on twins.

POLIO
Benefits At No Extra Cost
In lieu of other regular benefits policy pays these benefits if polio strikes—
For Hospital Bills, up to..... $500.00
For Doctor's Bills while in the hospital, up to $500.00
For Orthopedic Appliances, up to $500.00
TOTAL OF $1,500.00

3c A DAY IS ALL YOU PAY
for this outstanding new Family Protection

Wonderful news! This new policy covers everyone from infancy to age 70! When sickness or accident sends you or a member of your family to the hospital—this policy PAYS $100.00 PER WEEK for a day, a month, even a year . . . or just as long as you stay in the hospital. What a wonderful feeling to know your savings are protected and you won't have to go into debt. The money is paid DIRECT TO YOU to spend as you wish. This remarkable new Family Hospital Protection costs only 3c a day for each adult 18 to 59 years of age, and for age 60 to 70 only 4½c a day. This policy even covers children up to 18 years of age with cash benefits of $50.00 a week while in the hospital—yet the cost is only 1½c a day for each child! Benefits paid while confined to any recognized hospital, except government hospitals, rest homes or sanitariums. Pick your own doctor. Naturally this wonderful policy is issued only to individuals and families now in good health; otherwise the cost would be sky high. But once protected, you are covered for about every sickness or accident. Persons covered may return as often as necessary to the hospital within the year.

This is What $100.00 a Week Can Mean to You When in the Hospital for Sickness or Accident

Money melts away fast when you or a member of your family has to go to the hospital. You have to pay costly hospital board and room . . . doctor's bills and maybe the surgeon's bill too . . . necessary medicines, operating room fees—a thousand and one things you don't count on. What a Godsend this READY CASH BENEFIT WILL BE TO YOU. Here's cash to go a long way toward paying heavy hospital expenses—and the money left over can help pay you for time lost from your job or business. Remember—all cash benefits are paid directly to you.

Examine This Policy Without Cost or Obligation—Read It—Talk It Over—Then Decide

10 DAYS FREE EXAMINATION

You are invited to inspect this new kind of Family Hospital Plan. We will send the actual policy to you for ten days at no cost or obligation. Talk it over with your banker, doctor, lawyer or spiritual adviser. Then make up your mind. This policy backed by the full resources of the nationally known Service Life Insurance Company of Omaha, Nebraska—organized under the laws of Nebraska and licensed in other states. SEND NO MONEY—just your name and address! No obligation, of course!

PAYS CASH BENEFITS REGARDLESS OF ANY OTHER HOSPITAL INSURANCE YOU NOW HAVE!

FREE INSPECTION . . . MAIL COUPON
The Actual Policy Will Come to You at Once Without Cost or Obligation

The Service Life Insurance Company
Hospital Department J-11, Omaha 2, Nebraska

Please rush the new Family Hospital Protection Plan Policy to me on 10 days Free Inspection. I understand that I am under no obligation.

Name.....

Address.....

City or Town..... *State*.....

THE SERVICE LIFE FAMILY HOSPITAL PLAN

SERVICE LIFE INSURANCE COMPANY
Hospital Department J-11, Omaha 2, Nebraska

previous experience made it easy for me to give a tie-up, OS a train to the next station and still remember to way-lay the section foreman and tell him his frog had arrived on the local.

I got assigned to a tough 2nd trick billing job because the older operators with seniority didn't want any part of it. I started my day by getting three kids off to school, fixing a noon meal for them and three boarders, washing or ironing or sewing until just time to walk ten blocks to my job. Did I say *walk?*

THE WIRE was my worst enemy. I never touched it unless I had to. I would writhe in shame-faced agony when some operator would say, "Is Extra 1532 by you yet?" and I would answer, "OK Tnx." Then I would vow to practice on my off-hours. What off-hours?

Being rolled from my hometown, I left a ten-room house and lived for four years in one-bedroom apartments. When I went to the dresser to pretty up for my next Seaboard ordeal I first pushed jacks, doll sweaters and jig-saw puzzles to one side, then stepped over skates enroute the three feet to the kitchen, scribbled on the blackboard, "Bring clothes in. XX Mama," gave the simmering pot of stew a last stirring and I was off. Operators are never late even if they come to work with their teeth unbrushed.

I graduated to a small agency at a junction, complete with outside toilet and all conveniences except water. I drank lukewarm water from a Mason fruit jar. There wasn't a tree or sprig of grass within hiding distance, so a trip outside was tried first one way and then the other. Sometimes I sauntered along very nonchalantly, giving a cheerful "Good morning" to the section crew as I passed —they were always working between me and my destination—and again I was quite brisk and business-like about it. Being a junction it was a busy train order job. Two dispatchers shot orders at you while one ear listened for ring or call from any or all of six phones and six telegraph wires. You had a little of everything.

HANDLING carload freight, another duty, is as dangerous as making faces at your superintendent, particularly handling perishables. The oranges or watermelons are never ready for billing until the train is whistling around the bend. As you wildly flip the pages through the tariffs looking for low commodity rates in competition with the waterways or maybe the price of 2% salt added to the ice, the dispatcher invariably presses the buzzer and keeps it thus until you leave your long pink sheets in the mill, stop 26 wire with "Min DS," and make a long slide into the chair to answer hm. If you get the ventilation record correct you are sure to have the car routed through a gateway where the rates do not apply. To really make it nice for a Florida cracker the bill of lading may startle you with, "Tangerines, Vancouver, B.C.," with export declaration papers adding an extra flourish. And of course you handle Western Unions in your spare time. I never got past the preliminary OK without breaking. "Meet Mama 2 pm bus." Twos and threes always confused me but what difference did one hour make—I'd tell myself as I tossed that night. Was it signed Silliard? Pilliard? Oh, yes, Hilliard.

My day at the agency was divided into BC and AD. Before the Consist and After Delivery. No. 467 threw off a long white tissue paper with 80 or 90 lines like this:

SAL 8286 Cmt Rdy Mix Ft Laud
WPB FEC

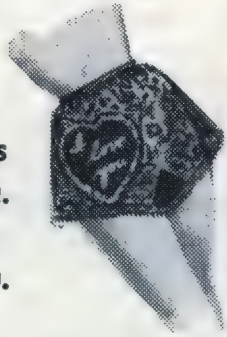
I prayed daily for a big thunder storm that would knock out the wires and save me. When a visiting operator dropped in to give me the ORT handshake and wound up by sending the consist for me, I could barely restrain myself from kissing the hem of his garment. No sooner than I got JA and began sending, the office immediately filled to the walls with people wanting tickets to Arcadia or Tampa. They lined up as spectators around me, country style, and I writhed in the arena with perspiration dripping in a pool from my elbows. The Christians in Rome were never so tortured. The relay office dreaded

ALLURE...

with a "PERSONAL" TOUCH

EXCITING PANTIES and NIGHTIE *With Motto or Initials*

There's "Sheer" magic in the breathtaking loveliness of the chantilly style black lace panties. Fetching and fascinating, you "wear your heart on your hip" with a daring, darling motto or personalized initials. The glorious nightie is an inspiring creation that beautifully combines clinging multi-filament rayon with delicate peek-a-boo black lace. The accent is on lovely, lovely you in these glamorous "personally yours" garments. Irresistible gifts that make you irresistible.



Nightie Colors:
Maize Lime
Orchid Apricot
Pink Blue
Panties
in Black Only

Nighties
$8.95 ea.
Panties
$5.00 ea.

RUSH COUPON NOW

QUALITY BAZAAR, 214 E. 49th St., New York 17, N. Y.

Please send me ... Nightie, ... Panties. Enclosed $..... check, cash or money order, postage prepaid. Sorry, no C.O.D.

NIGHTIE—Color ....., Sizes: 32, 34, 36, 38, 40 [circle size desired]
PANTIES—Black Only, Sizes: Small, Medium, Large [circle size desired]
MOTTO [Check One] ( ) I Love You ( ) Forever Yours ( ) Dangerous Curves ( ) No Trespassing

INITIALS .....

NAME .....

ADDRESS .....

CITY..... ZONE..... STATE.....

me about as badly as I did them and were slower and slower in answering.

After a particularly bad day I re-read Dale Carnegie and wrote a letter to the boys and frankly told them I was whipped and placed the blame on myself, where it most certainly belonged, and enclosed with it a box of Hav-a-Tampas. On the railroad, as elsewhere, the really big people are the kindest and most unassuming. They sent me back a note I cherish, with four one dollar bills pinned to it and told me my letter, admitting how sorry I was, did their hearts good and *they* would buy the cigars and celebrate. Knowing they were my friends made the difference that started my improvement on the wire.

My stint on the railroad has taught me a lot about a class of people I knew nothing whatsoever about, being the only railroader in my family. The men are easier to work with than the few women who are scattered about pulling semaphore boards. Men say what is eating them and it is over with—"Get that damn dog out of here." Women beat around the bush. "Have you been bitten by any fleas lately?" The men take criticism better than the ladies do. Women act like women and get their feelings hurt. The men, however, are the worst gossips. Every tidbit of news is carried via diesel and caboose to the uttermost low rail but their hearts are as kind as fiction pictures them.

AS FOR REMAINING a lady, a gentlewoman is a gentlewoman no matter where she is. You can slip off your good shoes and hoop up a train in the rain and mud and still be a lady. My religion hasn't suffered either. I was told to begin with, that the only way to make a telegraph operator was to learn to sleep on the table and to cuss. I'll admit that I can qualify now but I'm more convinced than ever that God does look after His own—not just the good old souls who are waiting when the church doors open, but also a discouraged operator who has been rolled twice in three weeks and, missing the bus to go hunt another job, just sits under a grapefruit tree and weeps bitter tears of exasperation. I used to kneel down neatly beside the bed to say my prayers, but now I say them when I go to work before seven in the morning and see the sunrise.

Son will soon be a full-fledged civil engineer and my daughter an economics teacher. Little One has been allowed to skip a grade and will enter high school next year. I wish the host of railroaders who helped me make it possible could be there for the graduation. The conductors who reminded me that a boxcar had been on the siding empty too long. The relay manager who gave me his own bug to use, saying, "It's a cinch you can't send with your hand. Try this." The section forces who brought me in buckets of coal from under the station or threw off a hunk of their ice on a July day. Officials who encouraged me and brought me sardines and crackers when I was stuck at jobs I couldn't leave. The engineer who got me a bucket of warm water from his engine to wash up in before I boarded the passenger train to go to the next job. Our supervisor of property protection, who took time to appear at traffic court with me when I had wrecked my car, myself and all my financial hopes. Roadmasters who allowed my lanky son to work with their camp car laborers during vacations—he passed the crucial test of becoming a man when he learned to handle a tamping machine in June and to work side by side with Negro laborers and make them like him. Dispatchers who knew I was crying tears of vexation, but like the gentlemen they were said nothing.

Yes, I've been working on the railroad and soon I'm going to quit. My nice new husband will buy the grits for me now. I'll leave my mux at the beautiful new yard office, give Son my 21-jewel Waltham, put my bug on the mantel beside the hand-painted plate and settle down on the front porch with orange juice in one hand and a sissy book in the other. I'll have an Irish setter on one side and a brown-eyed grandchild on the other. My view? You guessed it. There is only a pea patch between me and the main line.

LOOK WHAT'S NEW FOR 52!

in World Famous

LIONEL TRAINS

- **Brand-New Diesels!**
- **New Train Sets!**
- **New Accessories!**
- **Plus** the Realism...Advanced Engineering...exclusive features that only Lionel brings you!

Model railroaders everywhere know that only Lionel Trains look and sound *and perform* like the real thing—the only trains with real R.R. Knuckle Couplers, Die-cast Trucks, Solid Steel Wheels and built-in Two-Tone Whistle. The most realistic of smoke-puffing steam loco's, the most authentic Diesels. See them at your Lionel Dealer's...*now!*

MACKINAW DIVISION

Michigan Central's Lonesome Branch— As Historic As the Straits of Mackinac

Hurdis M. Ready

FRED C. OLDS

THE MACKINAW BRANCH of the Michigan Central pokes a long steel ladder up through the center of Michigan's lower peninsula, leaning its top rung against the historic Straits of Mackinac 182 miles northward. Part of a rail system sometimes called the Mackinaw Division, the branch starts north from Bay City, the New York Central division point, manufacturing and port city of some 50,000 population located at the foot of Saginaw Bay on Lake Huron's west shore. From this busy terminal, rails go south to Detroit and Jackson, north to Mackinaw and west some 15 miles to Midland, site of the vast Dow chemical em-

George H. Mabie

pire. The Mackinaw has been a part of three railroads and owes its construction to a fourth which had gotten practically nowhere when development was abruptly halted shortly after the Civil War. It is a branch which has its past woven tightly with dreams of riches, federal land grants and the state's lusty, brawling logging industry. Inasmuch as its development became quite involved, it is typical of much railroad building in the United States.

Historically speaking, the Mackinaw's past was first documented far southward in the state on February 23, 1864 when a group of investors organized the Jack-

son & Lansing Railroad Company to build from Jackson to Michigan's new capital at Lansing some 37 miles distant. Henry A. Hayden was named president of the new company and William D. Thompson, of whom we shall hear more later, was treasurer. Records show that the city of Jackson contributed $50,000 to the new venture while the citizens themselves encouraged the work by liberal stock purchases. A success from its inception, the railroad put its rails into Lansing during the summer of 1866, and about this time the company changed its title to the Jackson, Lansing & Saginaw Railroad Company. Then came a stroke of good fortune which virtually assured the road's extension northward. In the fall of 1866 the JL&S bought that part of the Amboy, Lansing & Traverse Bay Railroad between Lansing and Owosso (28 miles), and with the purchase the road acquired the AL&TB's federal land grant.

The road's initials caused it to be jokingly referred to as the *"Awfully Long & Terribly Bumpy,"* and one newspaper wit in Lansing also dubbed the road the "Ram's Horn Railroad" because of the circuitous and indefinite route by which it proposed to reach Traverse Bay. The Jackson, Lansing & Saginaw, by the way, obtained more than 600,000 acres of land by its timely purchase of the Ram's Horn, according to an 1875 estimate.

The Civil War was over, big projects were afoot, promotion was the order of the day and it would not be too many years before the JL&S would be a great railroad built through to the straits. Congress in 1856 had enacted the famous land grant law by which Uncle Sam gave railroad builders every alternate section of land along their right-of-way. There is little wonder that this law set men to building railroads, starting at such places as Amboy and projecting into the expansive nowhere. Whether railroading paid off or not, the sale of land to newcomers in the state would. Most of the JL&S public land grant acquired by its purchase of the Ram Horn road lay north of its Saginaw-Wenona terminus. Then a separate community, Wenona later became part of Bay City. While some lands were located in Gratiot, Saginaw and Bay counties, the majority of the acreage was in Ogemaw, Roscommon, Missaukee, Kalkaska, Crawford, Otsego, Antrim and Cheboygan counties. The railroad's guide to this land, published in 1875, sets forth that "more than a third of the grant was pine and hardwood tracts, while maple forests were unsurpassed in Otsego and Cheboygan counties." In Roscommon county the grant was described as constituting 83,000 acres containing an estimated 348,249,000 feet of "good pine timber." Prices paid for pine land, said the guide, ranged from $10 to $25 an acre, according to location. To promote its sale the railroad promised purchasers a perfect title, low price with one-quarter down and the balance on ample time.

With a future looking brighter than ever, the JL&S launched surveys to continue its line north of Owosso on June 4, 1866 and construction was started in November. Track was laid to Saginaw in 1867, and on December 6 it was extended to Wenona, a distance of 116 miles north from Jackson.

Among the builders who put the Jackson, Lansing & Saginaw first into Wenona and later to the straits, the most prominent was Thompson, mentioned previously. A versatile character who mixed business with politics, he was a leader in organizing the railroad company. Its successful completion to Wenona in 1867 was in great measure due to his labors and influence. He was a merchant, a banker and a Democrat who served one term as Jackson County clerk. With "marked success" he operated a line of towboats and river steamers carrying freight and passengers between Niles and St. Joseph in southwest Michigan on the St. Joseph River. In 1870 when construction of the Mackinaw started north of Wenona the work was under the general supervision of Thompson. In the words of the builders, the JL&S moved towards the straits "to connect with a railroad to Marquette

Buskirk

NOTHING FANCY. While Peacock isn't on the Mackinaw the backwoods depot was typical of accommodations in Michigan's pine country early in the century

and the iron and copper mines of Michigan's upper peninsula." There also was the incentive to tap the lush timber stands through the central Michigan north. Up to 1870 lumbering in Michigan had been confined to the immediate vicinity of streams. In winter the logs were cut and hauled to the stream bank to be floated down by spring freshets to the mills below. About this time newer logging districts were being opened up in areas on the state's east side, drained by the Rifle, AuSable and Thunder Bay rivers, and the Manistee and Boardman rivers on the west side. This still left large tracts of timber, inaccessible to streams within the interior of the state, untouched until tapped by railroads.

This great interior region was penetrated by the Jackson, Lansing & Saginaw, pushing north from Wenona; the Flint & Pere Marquette Railroad extending westward from Saginaw, and the Grand Rapids & Indiana Railroad reaching north from Grand Rapids in west central Michigan.

In many ways it was a bold undertaking the JL&S was embarking upon in 1870, traversing an unbroken wilderness. While Jackson and places on main rail lines further south considered themselves civilized, Wenona folks were still as deep in the woods as the Indians themselves.

Part of the 182-mile gap to Mackinaw City was the completion of the first section, 5 miles to Kawkawlin, on January 31, 1871. The end of track reached Standish, 23 miles beyond, by August 31 of that year. While the next lap was being pushed to Wells, the Jackson, Lansing & Saginaw was leased for its corporate life on September 1, 1871 to the Michigan Central Railroad. It likely came as no surprise and some rail historians have set down the fact that the building of the JL&S was promoted by the Michigan Central, which subsequently controlled it from Jackson to Mackinaw City, 295 miles, as a division of its holdings.

Records of 1871 show that three men, holding more than two-thirds of the road's stock, leased it to the Michigan Central. O. M. Barnes of Lansing owned 2808 shares; H. A. Hayden, 2450 shares, and Thompson, 4449 shares. Hayden and Thompson were from Jackson. The lease figure was reported to have been $70,750 a year. It might also be pointed out that about this time the Michigan Central Railroad Co. was expanding in other directions, acquiring charter to the Michigan Air Line and possession of another line opened in 1870 between Jackson and Grand Rapids. Even before the JL&S was leased to the Michigan Central, it was operated in conjunction with the MC, and its trains used the MC depot in Jackson.

The latest chapter in ownership of this road was written on January 2, 1930 when all the Michigan Central's owned and leased lines were leased to the New York Central Railroad, the ICC approving the transaction in a case called the New York Central unification.

However, historians who delve into Michigan railroading, state that the NYC had bought stock in the MC and gained control of the road before or shortly after the turn of the century. Pictures taken of motive power on the Mackinaw early in the 20th Century show the New York Central label carried on locomotive tenders. The NYC proposed to acquire the MC by ownership in 1930 rather than by lease, but to avoid any possible difficulties with minority stockholders it decided to lease the property.

Despite the change in ownership, work went on without halt, rails reaching Wells by December 31, 1871. The longest single link on this section, connecting Wells and Otsego Lake, 72 miles north, was ready in May, 1873. Gaylord, 8 miles farther, was reached that July while the 58-mile gap to the straits was closed December 18, 1881, more than 8 years later.

THE NYC is the last road using steam power in the northern part of the peninsula. The Pennsylvania and the Chesapeake & Ohio's Pere Marquette District, both north of Grand Rapids, and

Ready

SNOWFIGHTER. A flange plow bucks the drifts on the old East Jordan Branch in the big April 15, 1923 storm. The branch was the Detroit & Charlevoix Railroad before the Michigan Central took it over

the Detroit & Mackinac Railway on the Lake Huron side are completely dieselized. The C&O rails end at Petoskey, far up the Lake Michigan shore, the D&M at Cheboygan and the Pennsy at Mackinaw City. Although growlers have not yet invaded the Mackinaw Branch, rumor has it that they will in the near future.

But let's take a look at the division first-hand. Ride across it into Michigan's north toward the Straits of Mackinac. Into a region and a past made colorful not only by railroad stock trades and financial transactions but by a history of a different sort—the logging industry. It is a sparkly bright morning with autumn in the air as the train prepares to head north out of Bay City's Wenona Yards. The New York Central's daily way freight, No. 209 on this Saturday, is being double-headed by two husky *Mikados* (2064 and 2225) with Conductor Pat Doyle in charge.

Doyle comes aboard checking his consist of 50 cars (half loads and half empties), the air test is completed and we head out of the yard into a russet and yellow landscape. Relaxed in the waycar's cupola with the windows raised and our feet up on the cushion, we watch Bay County real estate flow beneath us and listen for the lead engine's low-throated steamboat chime signal for rural crossings.

Beyond Wenona the track roughly parallels Saginaw Bay's west shore and busy highway US 23. We make a brief stop to take on water at Pinconning, where we pass the Gladwin Branch poking its weed-grown right-of-way 27 miles westward and where once-weekly freight service is still maintained. Next, 9 miles beyond, comes Standish where Brakemen J. O. Hughey and G. K. Phillips set out a pair of cars. Once again Engineer G. E. McKendry on the lead locomotive whistles off and we head north again.

At Standish the track angles northwesterly beside highway M 76, beginning a gradual climb toward hilly country starting further north at West Branch. Train 209 makes a switching stop at the south village limits to set out 5 or 6 tank cars at an oil refinery. After this chore we move from the waycar to the locomotive for the run downtown to a lunch stop. After lunch we again climb upon the lead engine's left hand seat with Fireman Carl Tracy to ride to Grayling, halfway point toward Mackinaw. Before we move out of town, however, there are three more cars to switch into our train plus coal and water to take on before we climb across Ogemaw Hill.

This marks the first challenge along a route which rises from 597 feet above sea level at Wenona to 1352 feet 119 miles north at Gaylord, receding from this point to 589 feet at Mackinaw City. West Branch is 956 feet above sea level at the base of the Ogemaw hills, over which our route passes and which lifts it 124 feet to Roscommon, 24 miles distant.

Of course, it is far from mountain railroading, but the Mackinaw provides its railroaders with some of the toughest grades faced on any Michigan iron pike. We bang out of West Branch with both engines pouring on coal to crest the summit of Ogemaw Hill, and the ridges and valleys, fall-splashed in scarlet, thunder back echoes from our stack talk as the *Mikados* buckle to their task in unison, hitting the grade head-on toward the west, then circling to cross the peak.

The landscape changes noticeably as West Branch drops away and we move into the mid-Michigan north. Settled areas become less frequent and they finally fade altogether between towns, and the hills are now covered with a patchwork of popple, scrub oak and jack pine. Interlaced against this background are patches of birch and maple, providing flaring spots of scarlet and yellow autumn garb. Forlorn clearings, dotted with rotting pine

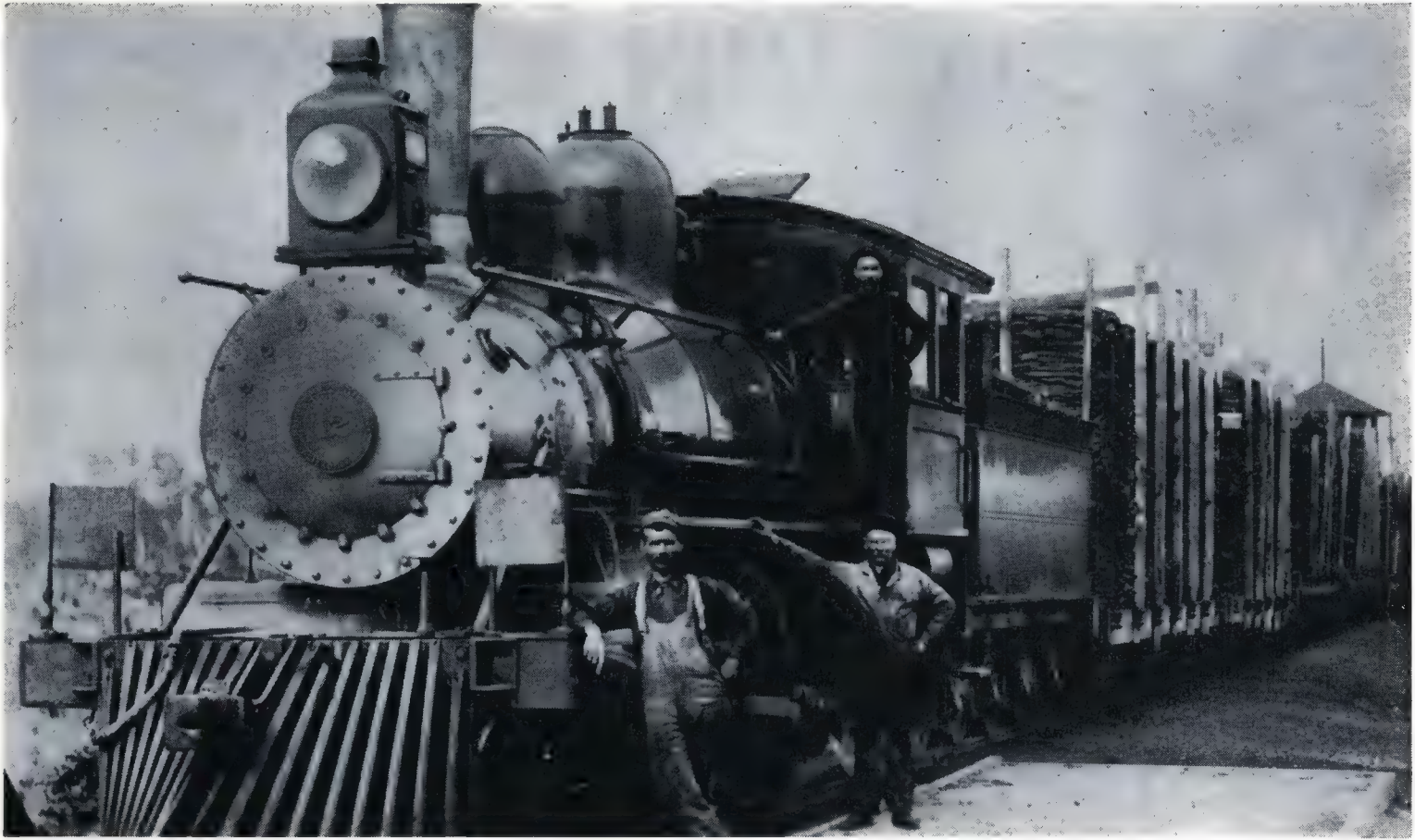
Continued on page 24

AFTER THE PLOW WENT THROUGH more shoveling was needed, this time by hand, with the crew digging out log cars

Ready

Stringer

INVITATION TO DISASTER. An open switch brought bid for No. 8281 to pile into a waycar at Indian River on December 7, 1906. That's steam from the locomotive boiler, not smoke from the caboose. Johnny-on-the-spot photographer, Earl Stringer, was brakeman on the train



Buskirk

MANISTEE MEN. An early Manistee & Northeastern lumber haul pauses at Manistee in 1900 to show off little *Mogul* No. 12 on the line which connected with the Mackinaw at Grayling

stumps, scars from a bygone logging era, are now seen frequently.

Fireman Tracy takes time out from regulating his stoker and injector to point to a scattered group of buildings on trackside, once the site of the thriving logging town called Ogemaw.

"Used to be a mill there," he shouts above the racketing blast of his engine as we move past the spot.

A few miles farther he again points from the cab window to a few concrete foundation markers poking their tops above a grassy sweep of meadow.

"Another town there and a mill once," he informs us as we pass a second ghost city bearing the now all but forgotten title of Beaver Lake.

Swinging over the Ogemaw crest was no real chore for two locomotives, and Engineer McKendry held 2064's throttle well back on its quadrant as we crossed the top and headed toward Roscommon.

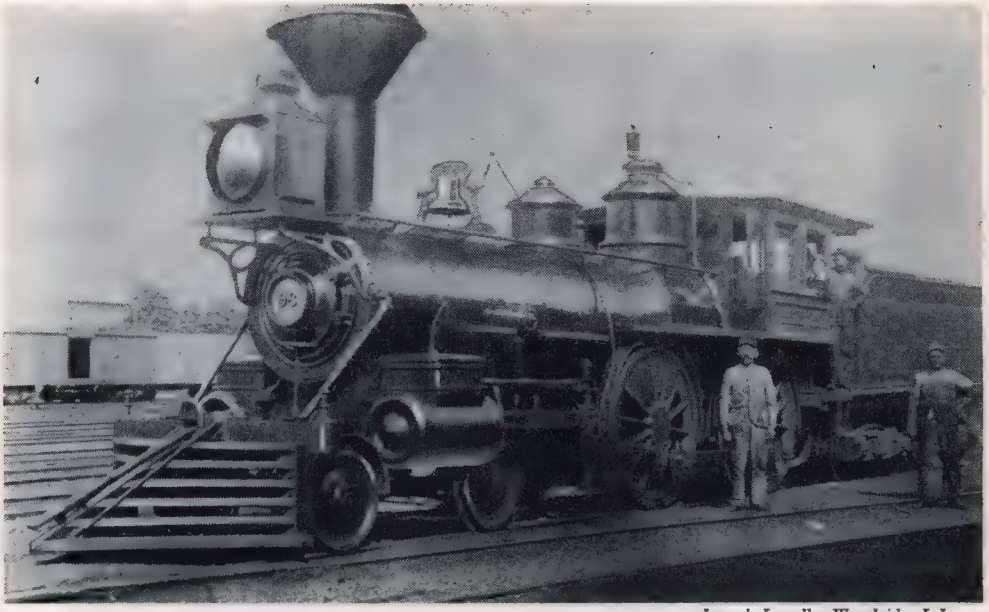
St. Helen, a small resort community and once a lumber village, and then Moore, drop behind us as the train rumbles through the sunny afternoon. A brief Roscommon stop sets out another car and the two engines grab into their bits to lift us over Cheney Hill.

Levelling off briefly at the summit, we again take up the climb to reach Horrigan, a long siding from which point we coast downgrade four miles to Grayling.

Freight engine and train crews change at Grayling, now chiefly noted as a resort center and starting point for the famed Au-Sable River country. Here too a new locomotive, No. 2039, replaces 2064 while 2225 continues north with its crew to Mackinaw City. Conductor J. L. Martin replaces Doyle, along with Brakemen J. J. Duffy and I. D. McIsaac. Engineer E. T. Hare will pilot the new engine, an Alco girl of 1913 vintage. Train 209 meets its southbound counterpart, No. 210, and we arrive in town to find No. 210 backed to the north end of the yards, double-shotted and prepared to make a run to clear Horrigan's Hill, down which we just slid into town. Train 209 clears the main in front of the station and No.

FAMOUS PIG. One of the stolid 2-6-0s which worked the logging branches early in the century. Not exactly pretty to look at, *Pig* 8363 was sired in Schenectady; had a maximum tractive force of 17,780 pounds

Ready



Joseph Lavelle, Woodside, L.I.

HEY, LAD! The youngster on the left side of the cab gives a passable immitation of some future Mackinaw Branch fireman. The *Ten-Wheeler*, No. 98, was photographed, oddly enough, in '98, at Jackson

210 comes barreling south through the yards, exhausts barking a noisy duet and pushing long streamers of smoke against an orange backdrop where the sun has dropped behind the AuSable hills. Grayling, now a village of 2200 or 2300 people and the seat of Crawford County, was platted by the railroad in 1874. One of its two principal streets runs east and west, dead-ending on the west at the railroad and depot. Both engines from Train 209 cut out and back into the coal dock in Grayling Yard, while the new locomotive prepares to take over head-end duties.

DURING THE LOGGING ERA Grayling's long yards had space for 800 cars. A roomy 16-stall roundhouse across from the depot serviced locomotives from Bay City and Mackinaw City, plus those working various logging branches running out of town. The Manistee & Northeastern Railroad once sent a spur eastward into Grayling, too.

In those early days timber set the traffic tempo, geared to a lively pace which seldom varied. Old-timers can still recall how trains of empty log cars were dispatched north nightly from Bay City for logging spurs in pine and hardwood cuttings. These trains for the most part ran extra, with 6, 10, 12 each night sliding out of Wenona at hourly, half-hourly or even briefer intervals, bound for woods spurs and logging towns—Alger, West Branch, Ogemaw, Grayling, Vanderbilt, Haakwood.

Hurdis M. Ready, Bay City engineer, remembers what this traffic did to running time on the single track main line.

"It often took 24 hours for a train of 20 flats to make Grayling from Bay City," he said. Half the time was spent waiting on sidings for loaded log trains coming south."

Today's Wenona Yard marks the third location the railroad has picked in the Saginaw Bay community. When rail first entered West Bay City the yards were at what is now Salzburg. Operations later were moved to West Bay City on Marquette Street. Last relocation brought the NYC to its present headquarters at Wenona. Originally the trains which came

as far north as Grayling were broken up at this point and their cars reshuffled and dispatched via various branch lines to timber holdings around this center, or to the north. Full cars of logs were hauled out on the return trips and then assembled into trains in Grayling for return to the Bay City and southern Michigan mills. Later this procedure was changed and one train of empty log cars would be peddled north from Grayling along the main line as far as the old Haakwood Branch, which went east about 2 miles north of Wolverine. The empty log cars would be left at each branch entry to the main line where, in turn, they would be picked up by a branch crew which would bring out a full trainload of log cars for transportation south. When the empty cars were all peddled, the engine returned and collected the full cars of logs left at the main line by branch crews. These were brought down to Grayling and sorted into trains for the southbound run.

A rather odd note was furnished to railroading then by a pickup train, so-called because it ran through the timber country picking up logs which had fallen off loaded cars.

Pine furnished the first timber in the central Michigan north, but after this had been cut, flourishing stands of hardwood withstood loggers' axes for another 20 to 30 years. In addition to the log runs the Mackinaw then counted a mixed local running between Bay City and Grayling and a way freight called the *Cannon Ball* running from Bay City to Mackinaw City. This last-named train carried a passenger and baggage car, too.

A branch line, originally incorporated as the Grayling, Twin Lakes & Northeastern Railway Company also ran into timber northeast from Grayling for 27 miles, ending at Lewiston. Daily passenger and freight service was first maintained, being cut back to a mixed train in 1901. The line was torn up in the 1930s. A McGraw Branch left the main line at Sallings, another ghost town located 7 miles south of Gaylord, running northeaster[illegible] to woods cutting and servicing a mill at Johannesburg. This branch also had daily service—while the timber lasted. While timber traffic boomed, three switch crews worked the busy Grayling yards on a 24-hour basis, a fourth crew working another trick switching the mill tracks in the town.

Prior to acquiring *Mikes* the Mackinaw Branch used several classes of locomotives, starting with small diamond stack woodburners when rail was first pushed through to the straits. Next came a class F-81D engine called the *Little Ten-Wheeler.* These locomotives were placed in service from 1891 to '93 and retired in 1922-24. Later came the *Big Ten-Wheelers,* put in service between 1900 and 1904 and followed by the *Compounds,* having a 2-8-0 wheel arrangement and used first in 1902. The *Big Ten-Wheelers* were practically all retired by 1935, while the *Compounds* left the division between 1925 and '32.

Well-known on the division, too, were the Class E-81A engines, better known as *Pigs* because they resembled well-fed porkers with blunt snouts and high stacks. Built by Schenectady, the *Pigs* were generally used on logging branches because of their light weight and good pulling qualities. These engines had a maximum tractive effort of 17,780 pounds with a 2-6-0 wheel arrangement. The first one went into service in 1887. The last one was retired in 1923.

The *Mikes* now used, built by Lima and American, are classed as H-7 and H-10. The H-10 is newer and heavier, furnishing a maximum tractive effort of 63,470 pounds while the lighter H-7 turns up about 56,100 pounds.

In addition to tapping its ready-made timber market the Mackinaw also served a rich resort area developed early in the 20th Century and centering about Otsego, Burt and Mullet lakes, the famous AuSable trout and grayling country and Mackinac Island.

There's an oddity about this French name. It is Mackinaw Branch and Mackinaw City but Mackinac Island and Straits of Mackinac. Local preference determines

Buskirk

OLD BOY. Mackinaw Branch railroaders called No. 887 the *Big Ten-Wheeler*, a class now retired. The Alco-built locomotive was photographed in the Grayling yards

the spelling, but the pronunciation is Mackinaw.

Early in the century passengers could leave a train at Mullet Lake, board a small steamer there at Pikes Hotel and travel through Indian River, Burt Lake, Crooked River and Crooked Lake, whence a dummy railroad would carry them to Petoskey on the Lake Michigan shore.

Jack Smith, retired Bay City conductor, recalls when 5 or more sleepers were carried north and south during the summer months. Two passenger trains ran northbound and southbound daily. Sleepers were carried from New York City, Cleveland, Detroit and Chicago, with extra ones added during the summer. When *Ten-Wheelers* were used for motive power, passenger schedules called for good running time. One run, leaving Bay City at 1:50 a.m., arrived at Mackinaw City at 7:20 a.m., the trip including seven regular stops plus flag stops.

Today NYC officials describe the branch as a bridge route with little on-line traffic, but moving bulk commodities from eastern shippers, Detroit and Ohio points into Michigan's upper peninsula and the western United States and the Canadian Northwest. Proof of this is evident in

Continued on page 31

BREAD WINNER. *Mikados* now carry the freight for the Mackinaw. Here is No. 1468 starting a run from Bay City

Fred Steck

Ready

THE JAMMER. After logs were skidded to trackside and piled, the Mackinaw men loaded them on flatcars with a steam jammer, on the Nunda Branch in 1908 and thereabouts. The jammer was simply a derrick built on railroad trucks, with a boom to swing logs from the pile to the cars. Nunda Branch extended eastward into timber cuttings from the main line south of Wolverine

Ready

WHEELS OF MISFORTUNE. Engine 8380 was pushing a string of flats into the Nunda Branch in 1912 when it overturned. The big hook has arrived from Bay City, with the division superintendent, observation car, awning and all. Barren countryside, stripped by the logger's axe and ravaged by fire, was typical of upper Michigan's logged-out areas

Fred C. Olds, Mason, Mich.

ONCE THE PROUD QUEEN of the New York Central's plush varnish runs, this lady is winding up her career twisting through the lonesome jack pine hills on the Mackinaw. Mackinaw City marks the end of the line, literally and figuratively, for this heavy *Hudson* class passenger puller from Alco

Train 209's consist, which lists cars for Great Falls, Mont., Bismarck, N.D., Winnipeg, Ont., Stockton, Calif., Duluth, Minn. and the Soo. When the last logs were cut, when resorters back in the 1920's abandoned coach and sleeper for the family auto, it marked the end of an era. Bigtime railroading on the Mackinaw Division came to an end. In 1952 the division gets along adequately with two trains daily each way—one freight and one passenger. The other varnish day-run came off in the 1930s.

A resort special, *The Timberliner* operates during the summer. Winter may bring a few snow trains carrying skate and ski enthusiasts to Grayling or Gaylord. Or a flurry of coach trains descend upon Grayling each summer when the National Guard summer encampment opens there. No longer a timber hauler, the Mackinaw Branch last year, for example, hauled iron ore from upper peninsula mines. This is the biggest tonnage item.

Thus Grayling's past is reflected in the division's past. Its glory days are over. The 16-stall roundhouse was destroyed by fire in 1939. The turntable was filled in. Only the station and tall coal dock remain as markers from that bygone time.

IT IS NOW 5:45 P.M. and practically dark as Train 209 starts north again, 11 cars lighter, these having been left at Grayling. Track parallels highway US 27 past Frederic, 9 miles out, a former logging town and eastern terminus of the old Detroit & Charlevoix Railroad coming in from East Jordan some 43 miles to the west. Eventually the road was incorporated with the NYC, after which its trains tied up in Grayling. This branch, too, was abandoned in the depression '30s.

On the long straight track toward Gaylord, Conductor Martin points to the village of Waters. It's now virtually deserted, but in the bonanza days two sawmills and a planing mill used to cut up lumber there.

We stop briefly at Gaylord, termed the "Top-O-Michigan" by virtue of its elevation of 1352 feet. Here we set out a car of gas. Then the two *Mikes* bark off again, easy this time, for it will be downgrade all the way to the straits. At the north edge of town we cross the old roadbed of the Boyne City, Gaylord & Alpena Railroad, another log hauler abandoned in the late 1920s.

From Gaylord north to Wolverine is 19 miles, the elevation dropping from 1352 to 789 feet. And 18 miles of the route constitute Vanderbilt Hill, toughest grade on the division. The railroad doesn't hit it straight, but sends its track twisting and turning through cuts and over ridges, getting leverage wherever the terrain allows.

Northbound, Train 209 frequently brakes to maintain proper speed—southbound freight finds the hill a long slow drag. Doubleheaders often take more than an hour to reach the summit. When two engines can't lift the load over, they double the hill. A mile short of Vanderbilt is the ghost city of Rogers, where the Yuill Mill and a private logging railroad had headquarters along with a 3-stall roundhouse. Yuill rails led east into pine cuttings in the Pigeon River area.

We are in snow country now. Gaylord is the worst spot, at least for drifting. Veteran railroaders claim it snows every day every winter in this country. Joseph Flynn, retired Bay City engineer, says, "In 1946 a passenger train I was operating stalled in the Gaylord yard about 9:30 a.m. and didn't get out until 5:30 o'clock the next night. The entire train, including the locomotive, froze up before it could be towed out. Passengers were marooned until a new train could reach them. Snow drifted so high it hid the engine. And the next winter I was stuck for 9 hours in practically the same spot."

It must have been the year of the big snow when 6 crews were tied up at Mackinaw. Train 206 was stuck in a drift about a half-mile south of Cheboygan, the jumbo plow was stuck north of Topinabee, and, said ex-Conductor Jack Smith, "I was marooned with a train 2 days at Waters."

As we trundle straitsward Conductor Martin would point to a shadowy opening in the woods where once a logging branch

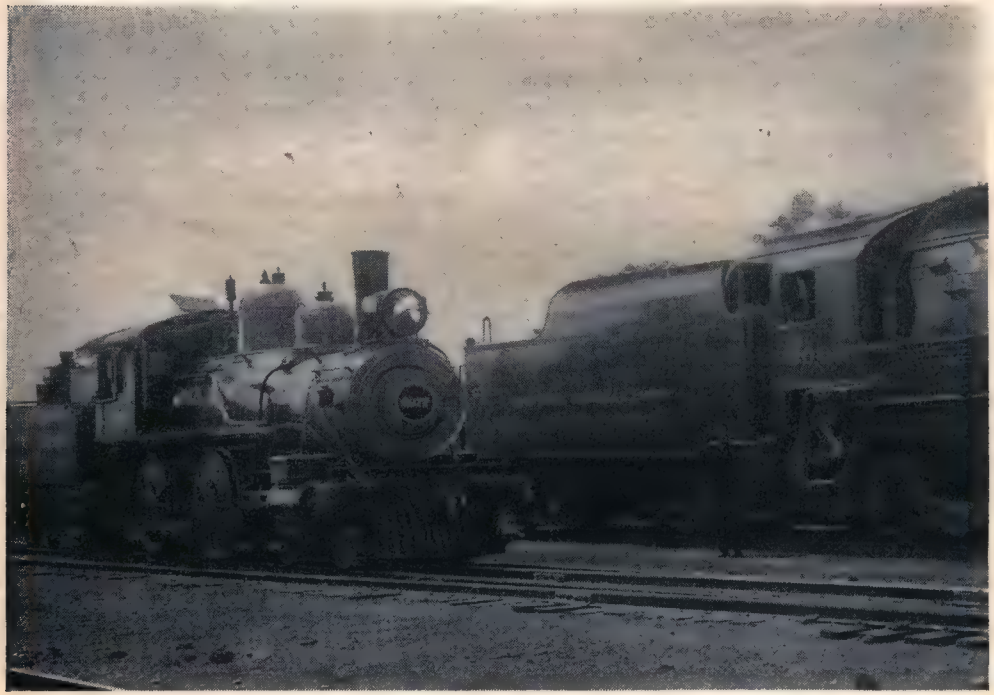
took off from the main line. North of Vanderbilt was the old Spiegel Branch, beyond this the Stewart Creek Branch.

Then came Wolverine. Here an engine house formerly was maintained for the busy Haakwood Branch. A crew also made headquarters here to double Vanderbilt Hill. But it now is just a whistle signal for the *Mikes* as we highball through Wolverine.

Our waycar casts a long shadow on the ballast in the early October evening. We are leaving timber country now, or rather what used to be timber country. The logs have been cut. That part of it now is but a memory. All that is left of the timber days are remnants—a few crumbling foundations; abandoned railroad grades growing up to blackberry briars and wild sumac; a grassy meadow by the side of some stream which once was a loading ground.

So, jogging through the night, keeping within the division's 35 mile-an-hour speed limit for freights, No. 209 makes brief stops twice more. At Indian River, the first of a string of resort communities along the west shore of Mullet Lake, we set out a car of coal. At Cheboygan, once one of Michigan's sawmill capitals, we pick up a car. From Cheboygan we chuff 16 miles more, to Mackinaw and the end of track. We enter the Mackinaw yard at 8:40 p.m. The big car ferry, *Chief Wawatam,* waits in its slip to take northbound cars across the straits for transfer to the Duluth, South Shore & Atlantic Railroad at St. Ignace. *The Chief,* an ice crusher for winter sailing, carries 20 or 21 cars.

Conductor Martin snuffs out the waycar lamps. As we open the door to descend, a damp wind blowing off the straits brings the acrid smell of engine smoke, mingled with the tangy odor from northern Michigan's woods. Enroute up the track to the depot we cross in front of a large chunk of 4-6-4, one of the Central's heavy *Hudson* passenger haulers and once the pride



UPSTAGED. ***Mike*** **dwarfs the** ***Ten-Wheeler*** **by position as well as size. Note the valve chamber contrasts—a hatbox on No. 8977 and fancy lettering on No. 8000's cylinder housing**

Steck

STRIKE TWO! Tradition meets a rival—a Budd *Beeliner* on its midday trip to Midland Junction from Detroit. Run was extended westward from its old Bay City terminus to Midland for the benefit of Dow Chemical workers seeking transportation to Detroit from Midland

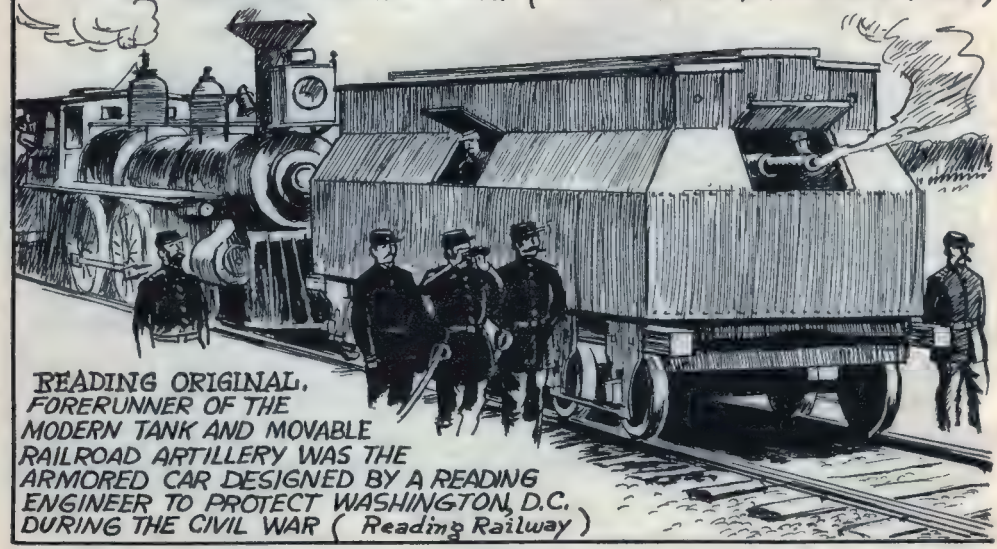
of its varnish fleet. Diesels bumped her to the Mackinaw Branch, without a doubt, and she waits to take the night train south to Bay City at 9 p.m. Conductor Martin leaves us at the depot. He bunks there with other crewmen. A switcher hoots hollowly back in the yards. It carries a lonesome ring in the northern night.

ALONG THE IRON PIKE

by JOE EASLEY

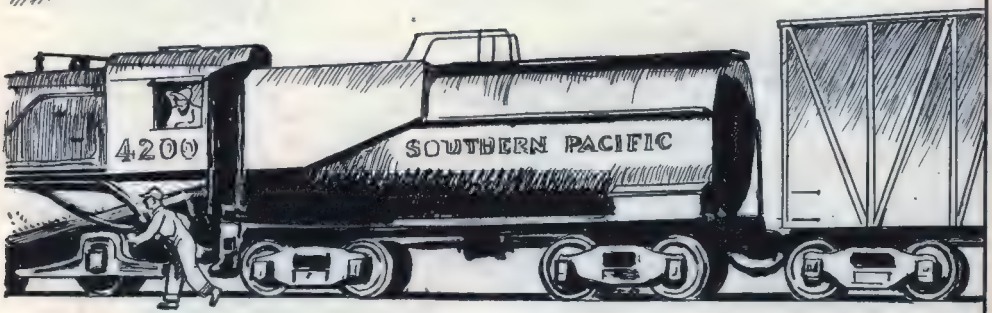
SHOW TRAIN. ALTOONA'S FAMOUS DAUGHTER, ACTRESS JANET BLAIR, WAS SURPRISED BY 500 HOME-TOWN FRIENDS WHO CELEBRATED HER BIRTHDAY AND SECOND ANNIVERSARY IN THE TOURING SOUTH PACIFIC SHOW ABOARD A PENNSY SPECIAL TO PITTSBURGH (Pennsylvania Railroad)

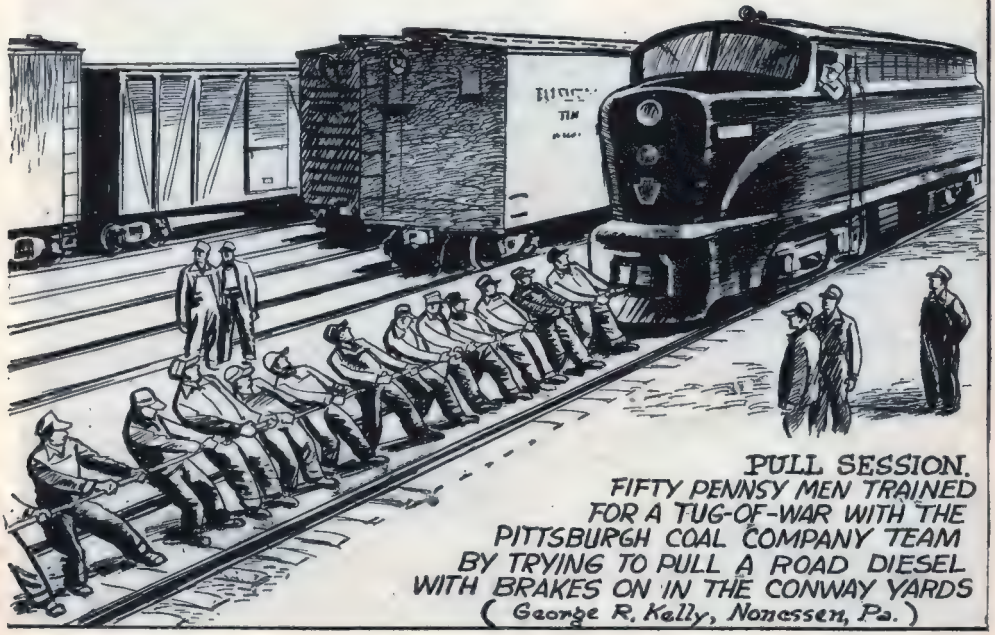
THE SUPER'LL NEVER BELIEVE THIS. A SOUTHERN PACIFIC FREIGHT TRAIN WAS DELAYED BY A HOUSE ASTRIDE THE TRACKS AT RED BLUFF, CALIF. IT TOOK THE HOUSE-MOVING CREW, RAILROAD MEN, POLICE AND A TOW TRUCK AN HOUR TO CLEAR THE RIGHT-OF-WAY (Arthur B. Armes, N. Sacramento, Calif.)



READING ORIGINAL. FORERUNNER OF THE MODERN TANK AND MOVABLE RAILROAD ARTILLERY WAS THE ARMORED CAR DESIGNED BY A READING ENGINEER TO PROTECT WASHINGTON, D.C. DURING THE CIVIL WAR (Reading Railway)

GREASED WAYS.
MARTIN ALOYSIUS CUNNINGHAM, 66-YEAR-OLD YONKERS (N.Y.) RAILROAD PENSIONER, WAS STRUCK DOWN EIGHT TIMES BY AUTOS AND TRUCKS DURING HIS 42 YEARS AS STREETCAR TRACK GREASER. "FOR OBVIOUS REASONS I PREFER TROLLEYS," HE SAYS
(Ted Sanchagrin)





PULL SESSION.
FIFTY PENNSY MEN TRAINED FOR A TUG-OF-WAR WITH THE PITTSBURGH COAL COMPANY TEAM BY TRYING TO PULL A ROAD DIESEL WITH BRAKES ON IN THE CONWAY YARDS
(George R. Kelly, Nonessen, Pa.)

Photos by Keystone

SUDAN RAILWAYS

Egypt's Back Country Depends Heavily on the Steel Highway, Its Chief Transportation Medium

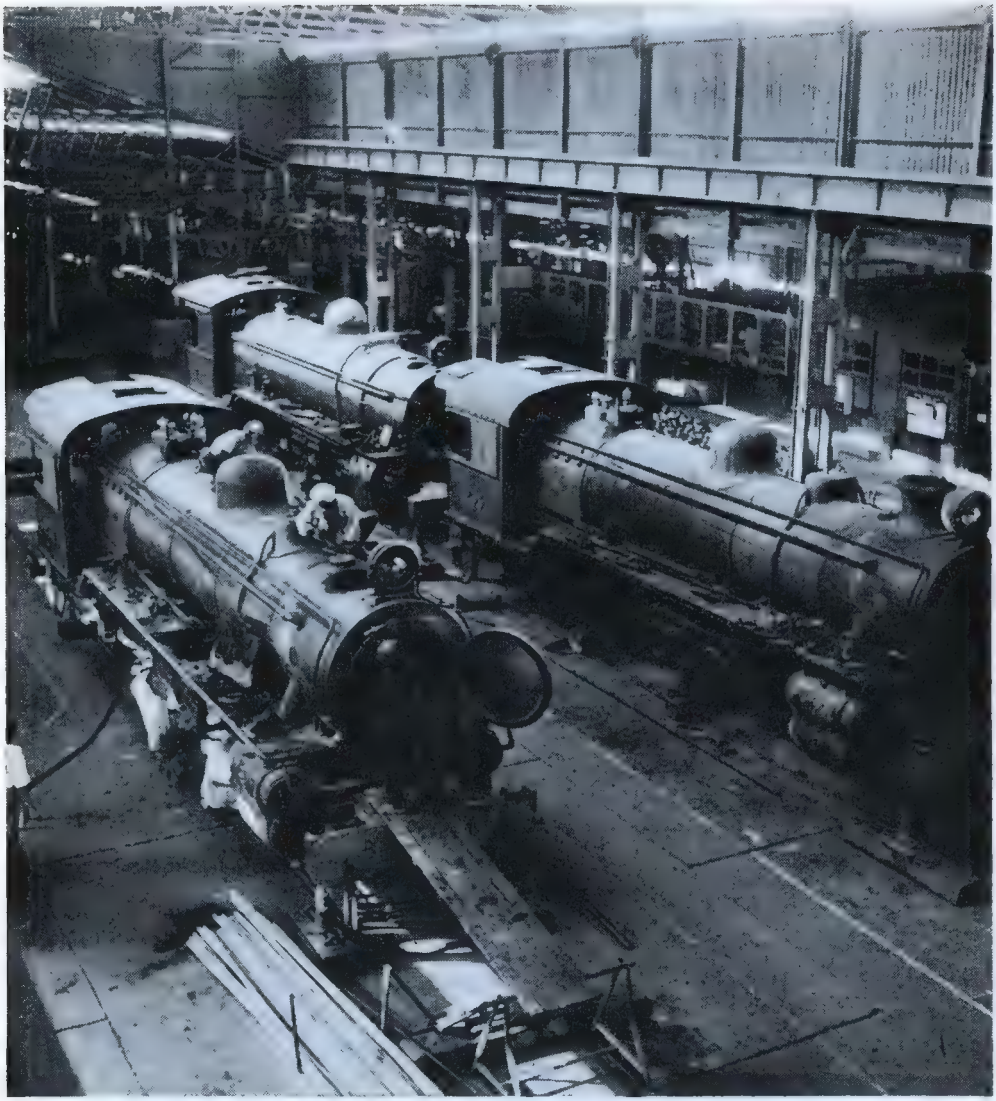
WITH THE FUTURE of the Sudan in the balance of world politics, Sudanese, British and Egyptians are equally concerned in what is going to happen, and an asset and service such as the Sudan Railways, is obviously well to the fore in political considerations.

Officially owned by the Sudan Government, the railway has always been managed and run on the business and engineering sides almost entirely by British experts, many of whom have devoted their lives to it. In recent years, however, the British management has been carrying out a policy of teaching as much as they can to the natives, and today there are a large number of Sudanese technicians and officials trained and working in responsible jobs on the railway, although the key jobs are still held by British. In the past the Egyptians have shown little interest in sharing responsibility or in doing the work of managing the line.

FIERY FURNACE is out of date; Sudanese welders work with modern oxyacetylene outfit at Atbara. Shopmen and engineers are mostly natives of hot country. Service in sandy deserts is hard on engines, most of which are of British manufacture

Locomotives are ordered from British factories, but much of the rolling stock is now made by native labor at the railway's own depot and workshops at Atbara. Steel for the tracks is imported, but ties and concrete are obtained from Africa. Repairs and overhauls are undertaken up to any stage in the workshops at Atbara. In the vast depot there are the training schools for native signalmen, mechanics and the host of other jobs for which instructional courses are necessary.

The story of the railroads in the Sudan really started with a project of the Khedive Ismail in 1870 but very little was done about it. The real work was done in connection with successive British military moves in the area between 1880 and the reconquest of the Sudan at the end of the last century. In 1899 the bridge across the Nile was completed at Atbara and preparations were made to extend the railroad southward as far as Khartoum. In 1909 the Khartoum Central Station was



IRON SHIPS of the desert. Under British supervisors, Sudanese carry out running repairs and complete overhauls to the large inventory of locomotives and other rolling stock

opened and the Blue Nile crossed and a year later another bridge across the White Nile to Kosti was opened. Today there is a total track mileage of 2293 over a total route of 2056 miles. Last year just under two million passengers were carried and receipts amounted to 5 million pounds.

The Atbara workshops provide complete servicing for the line and for staff training. During 1950, 167 traffic department staff members passed through the school. The vast stores at Atbara cover 35 acres, with 1500 square yards of covered storage. They supply parts for and maintain 181 engines (six of them modern diesels) 2813 "goods vehicles," and 339 passenger coaches.

The Sudan Railways are prosperous, profitable, efficient and expanding. Labor troubles are few, the unions working amicably with the authorities. Whatever happens in the Sudan, the tremendous asset which the railroads constitute is certain to weigh heavily in the balance.

BIG BRASS pulls an inspection tour at Atbara Shops. Sayed Abdullah Hason di, *right*, Under-Secretary for Sudan Railways, examines a main rod which has had new bearing fitted. Beside him is H. Clough, Asst. General Manager. Total length of railway now in operation is 2056 miles

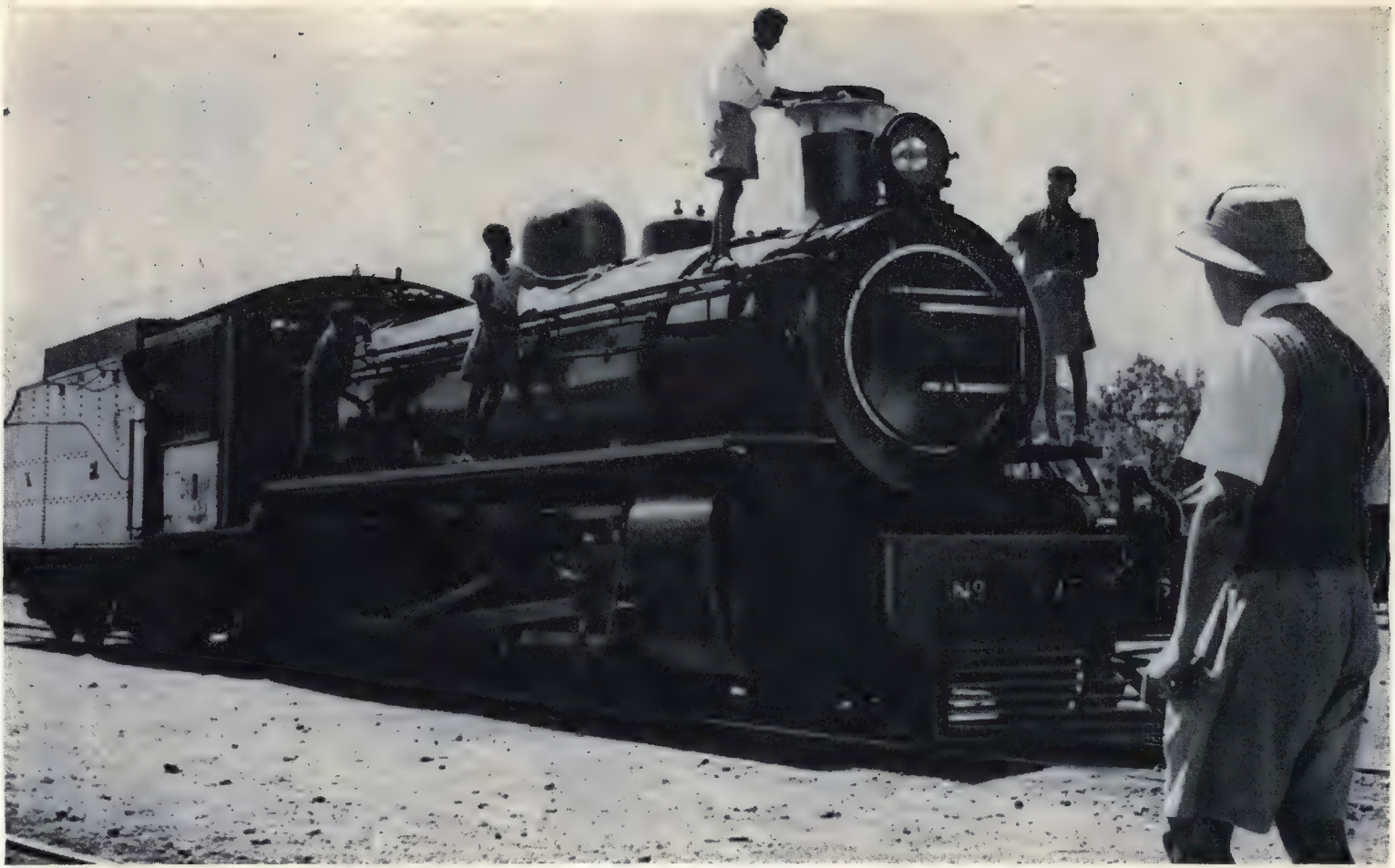
SCARFACE STUDENT concentrates on model pike layout with the aid of textbook and instructors. Increasing numbers of Sudanese are being taught to take over the jobs once performed only by whites. Since most of the road is single-tracked, a fool-proof signal system is essential

NO STAINLESS STEEL HERE. In Atbara carshops, *above*, where most Sudan rolling stock is made, time-honored material is still wood. *Below*, Text-books for student rails are printed in native tongue

NARROW-GAGE RAILS lead to tie-treating plant where "sleepers" are impregnated against voracious African termites and severe desert temperatures

EVERYTHING FROM RAILS to throttle valves are kept in stock in the steel stores at the depot north of Khartoum

MADE TO ORDER. Concrete yard stockpiles such necessities as concrete "sleepers" and paving stones for stations



BRAND NEW TEAKETTLE. Atbara is a "railway town" where all stores, maintenance, repair and construction work is carried on for the whole system

SUDANESE NATIVE CRAFTSMANSHIP is second to none, as evidenced by completed coach. Small windows cut down heat of blazing sun

EARLY

ACROSS THE RAIL map of the state of Pennsylvania runs a near-diagonal single track that connects the Juniata River at Lewistown and the Susquehanna River at Selinsgrove. Chartered in 1865 as the Middle Creek Railroad, it was opened for operation in 1871 as the Sunbury & Lewistown. Today it is a part of the Pennsylvania's Middle Division from Lewistown to Selinsgrove, the Susquehanna Division forming the balance over the Susquehanna River to Selinsgrove Junction.

This single track early became known as

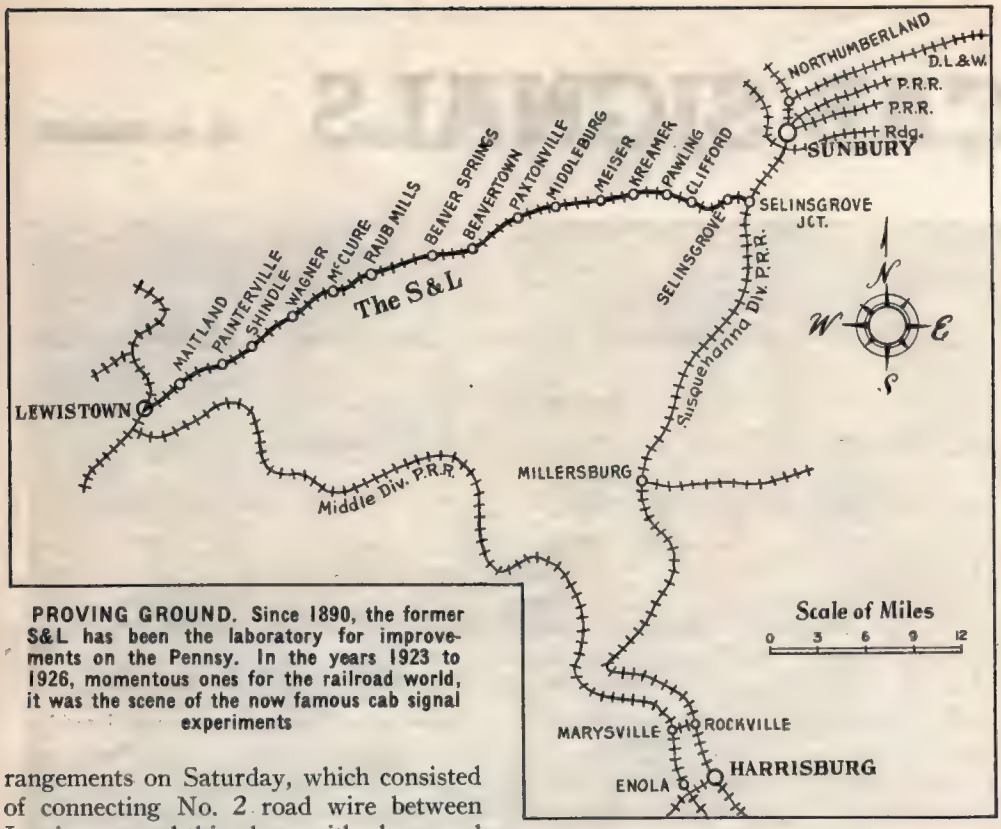
CAB SIGNALS

W. M. SCHNURE

the "Short Line" and traffic was so designated when routed over it. It always was, and is today, known locally as the S&L. It was early in the limelight as a testing road. In the Gay Nineties, the Pennsy assigned a new improvement to its rolling stock for a tryout on the Short Line. A contemporary news item ran as follows: "In January 1890, Engine 777 on the S&LRR was taken from its run on the *Mail* and fitted up at the Altoona Shops with especially fitted passenger coaches and then placed on its regular run again. This entire train was equipped with an experimental steam heating and carboline lighting system—the first of its kind and the forerunner of the standard equipment now in service all over the Pennsylvania System."

A decade later the *Snyder County Tribune* of March 9, 1900 printed this item: "Sunday an experiment of much importance and one which is said to be the first successful experiment of the kind was made.

"Supt. S. P. Hutchinson of the Sunbury & Lewistown Railroad, with a number of his subordinates, made the necessary ar-



PROVING GROUND. Since 1890, the former S&L has been the laboratory for improvements on the Pennsy. In the years 1923 to 1926, momentous ones for the railroad world, it was the scene of the now famous cab signal experiments

rangements on Saturday, which consisted of connecting No. 2 road wire between Lewistown and this place, with phone and telegraph instruments.

"The experiment consisted of sending a telegraph communication and a telephone message over the same wire at once and at the same time. The operator was able to send the message and simultaneously a telephone communication was transmitted to another person on the same wire. The experiment was a perfect success."

Recollections here place Trainmaster Charles F. Kissenger at Selinsgrove for the test—the office he had once worked as a telegraph operator on the S&L. An interesting development was the oddity of hearing over the train wire the air pumps and the bells on the yard engines outside of the then Lewistown (Junction) train dispatcher's office.

In 1923, an epic in railroading, on an experimental basis, again took place over this track between Chestnut Street, Lewistown, to Selinsgrove Junction when it was a portion of the now abolished Sunbury Division, with the late Lawrence W. Allibone as Superintendent.

As an adjunct to the single-track S&L, the double track of the Williamsport Division between Selinsgrove Junction and Race Street, Sunbury, was added so as to include certain other traffic.

From July 11th, 1923 to January 17th, 1926, the eyes of practically the entire railroad world were centered on this test, itself prompted by certain rulings of the Train Control Board of the Interstate Commerce Commission, then demanding additional safety protection on highspeed trunk lines.

The experiment involved the then newly developed "Union" Continuous Automatic Train Control, yet untried by traffic conditions. It was installed under the supervision of Chief Signal Engineer A. H. Rudd of the Pennsylvania Railroad, acting as chairman of its Train Control Board, in conjunction with the Union Switch &

Signal Co., inventor and manufacturer.

The cross-country, single-track S&L was an ideal testing ground. It had passing sidings on an average of every five miles, a minimum of sharp curves and two controlling grades—Ragers Summit and Clifford—both having several short sections with a grade of less than one percent.

This division's daily traffic averaged six passenger and about the same number of freight trains over its entire length. Track was 85-pound steel, rated at 60 mph. for first-class trains and 40 for freights. It had cinder ballast underlaid with rock ballast, from the days when over two score double-headed trains used it daily.

Assigned motive power was the standard Pennsy D16 and H6 types, but on account of the location of this experimental line between two heavily trafficked routes—the main line's Middle Division and that of the Washington-Buffalo line—detouring took place frequently, on a moment's notice, in which case larger and heavier power was handled.

According to contempory data, twelve or more locomotives were sent to the Altoona Shops to return later equipped with new, awe-inspiring devices in their cabs, on the frames and airbrakes. Besides electrical control features affected by the track circuit, two oblong upright metal boxes, with three illuminated circular glass apertures, were located in the cab in front of the engine crew. There was also a warning air whistle overhead in the cab; if the engineer did not acknowledge it within six seconds, the brakes went into emergency automatically.

No wonder these new gee-gaws were the subject of much discussion and inspection by interested motive power and signal experts, as well as engine crews from all parts of the country.

At the same time, switch shanty and caboose groups held hot-stove debates those cool days and nights of early '23, when the work of installing this new system was under way, as to just how this "superman" control would work under the slam and bang and twisting of a running locomotive.

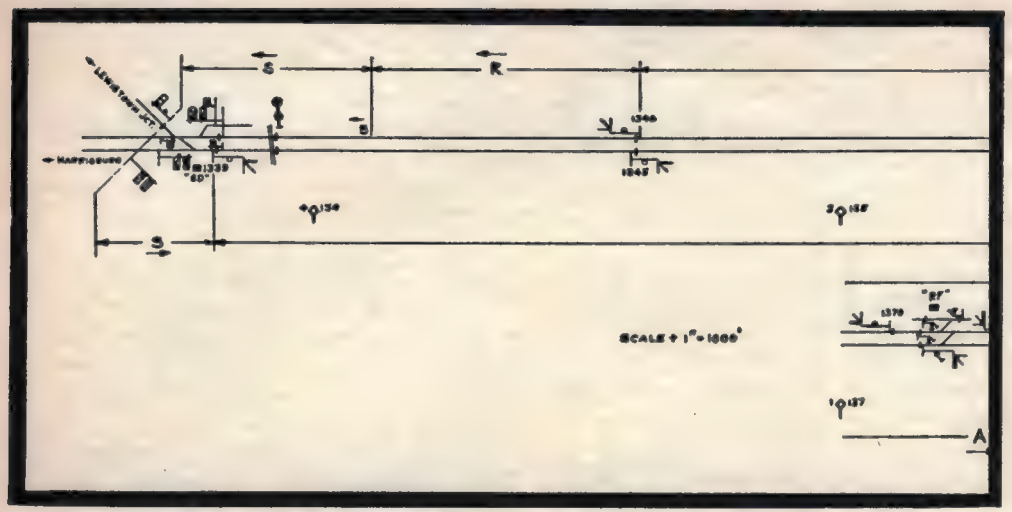
Construction Foreman Richard Jewens and his signal gangs were hard at work erecting standard position-light signals and bonding rails, installing relay and battery cases, control boxes and other of the numerous signal fixtures. A 4400-volt AC power line was being built the entire length of the experimental trackage.

ONE FEATURE of the signal arrangement on the S&L consisted of the eastern half of the roadside signals being operated semi-automatically by remote control from the dispatcher's table at Sunbury. The other portion west into Lewistown had single track automatic signals. This setup was used to determine their relative value, if any, on single track.

During the installation, it was found necessary to remove all dirt and cinders from under the rails between the ties to reduce track circuit failures, especially from wet track.

The late George H. Thomas, Sr., then Road Foreman of Engines, Sunbury Division, at a staff meeting held in the general superintendent's office, Williamsport, made a suggestion in connection with the above track problem. He was ordered to go ahead with it at once. Accordingly, Engine 2896, a D16b, was taken to the Northumberland Shops and equipped with a set of steam jets placed on both sides of the pilot, the nozzles being near and pointing towards the base of the rails on the inside of the track. The blowing steam successfully and economically cleaned the track ahead of the slowly moving locomotive.

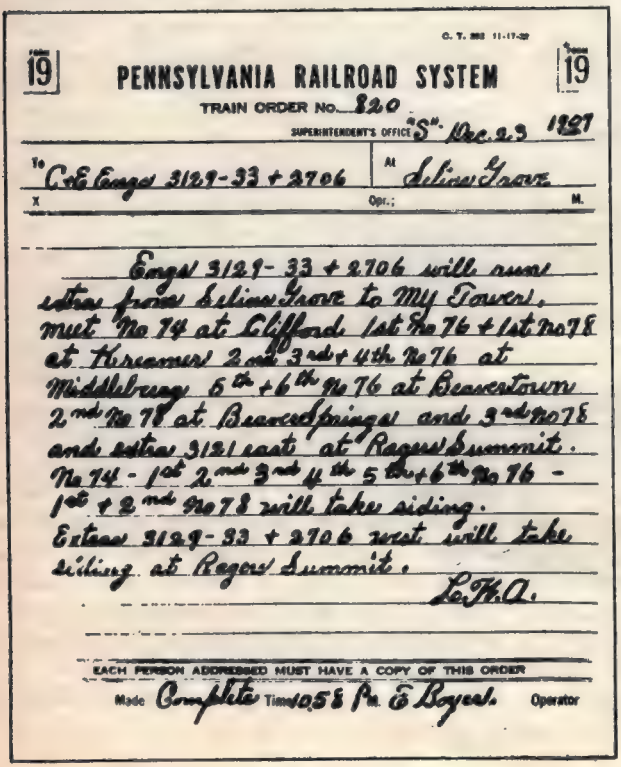
A word about these cab signals that were the grandaddy of those now in use. Instead of the present illuminated position-light signal indications, repeating the outdoor signals, these had letters: "A" for "Authorized Speed" for two blocks ahead; "R" for "Medium Speed" one block ahead and "S" for "Slow" within 1800 feet ahead. These letters were used all through the experiment. The present arrangement of repeating the actual outdoor signals was suggested but not then acted on.



THE CRUCIBLE. Diagram of trackage and electrical circuits where pioneer tests actually took place in what was one of the first important instances of the practical application of electronics in *any* industry. Neat layout gives no evidence of bugs which developed during experiment. *Below:* Reproduction of pre-cab signal 19 order. Hoggers and conductors felt uneasy taking the main without flimsies, at first

Finally, after fourteen months of intensive activity on the part of signal, track and motive power experts, in close collaboration with the system's manufacturers, the installation was declared ready.

On July 11, 1923 at 12:01 a.m. Sunbury Division General Order No. 2309 went into effect when the manual-block stations at GD (Selinsgrove Junction), KF (Selinsgrove), K (Kreamer), FI (Middleburg), BV (Beavertown), MZ (McClure) and PB (Painterville), became train order offices only, with their semaphores normally in the proceed position. They were then stand-by points in case of any emergency that might arise in the operation of the train control experiment.



19

PENNSYLVANIA RAILROAD SYSTEM

19

TRAIN ORDER NO. 820

SUPERINTENDENT'S OFFICE "S" Dec. 23 1927

To C.E. Engrs 3129-33 + 2706 At Selinsgrove

X Opr.: M.

Engrs 3129-33 + 2706 will run extra from Selinsgrove to Mt Towers, meet No 74 at Clifford 1st No 76 + 1st No 78 at Kreamer 2nd 3rd + 4th No 76 at Middleburg 5th + 6th No 76 at Beavertown 2nd No 78 at Beaver Springs and 3rd No 78 and extra 3121 east at Rogers Summit. No 74 - 1st 2nd 3rd 4th 5th + 6th No 76 - 1st + 2nd No 78 will take siding. Extras 3129-33 + 2706 west will take siding at Rogers Summit.

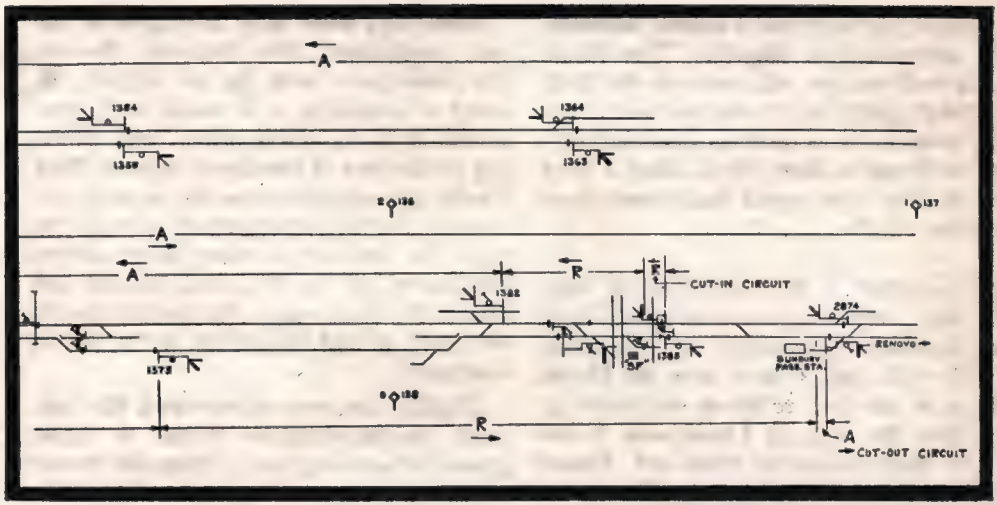
L.F.K.A.

EACH PERSON ADDRESSED MUST HAVE A COPY OF THIS ORDER

Made Complete Time 1058 P.M. E Boyer Operator

At the same time, all the facing-point distant switch signals were put out of service, relinquishing their function to the new cab signals.

Freight Conductor Hob Smith of Northumberland remarked: "It was very queer to accept a proceed signal and pull out on the main track without a running order in your hand, especially on single track. However, we got



over that feeling and we ran on signals alone. When we came to a 'stop' signal that did not clear at once, we went to the nearby phone and called the dispatcher for orders, if any."

In addition to this protection against head and rear end collisions, the experiment included speed control. Also involved were several restricted curves, the sixteen-span Susquehanna River Bridge, and the borough of Selinsgrove with its five grade crossings and a 10 mph. ordinance.

In these restricted sections, the cab signals would indicate "S," and to emphasize the meaning, a governor on the pony truck brought prompt action if the designated speed was exceeded. That fact bore down considerably on some of the eagle-eyes who loved to get over the road when a bit late, regardless of rules.

The late Charlie Fisher, then living in Sunbury, was noted for his spurts of speed. He naturally resented any restrictions, and took chances at times on this new-fangled thing that held him down.

"Had a good run the other night," he would say, in pre-experiment days. "Brought a solid Pullman train down from Beavertown to Selins Grove in twenty minutes. Twenty miles, you know!" Then he'd smile.

During the experiment, the speed control caught him frequently, especially coming down off the Clifford grade into the Selinsgrove area, when he would hit the beginning of the circuit a little too fast. On would go the emergency. Then, red-faced, Fisher would get down from the cab as the conductor ran up, and reach under the fireman's side to turn an anglecock on the train line to reset his brake valve.

At the upper end of Sunbury, at Kase Tower, where the Wilkes-Barre route branches off, the operator reported Charlie for speeding through the interlocking. It seems that after cutting his engine off his train down at Sunbury passenger station, he would open up for about all it would do in his hurry to get into the Northumberland roundhouse.

So a few days later, the speeder was in front of Road Foreman of Engines Thomas to explain his spurts over the interlocking.

The conversation went something like this, according to the caboose talk: "Why Mr. Thomas," said Fisher with a surprised expression. "You know I have a speed regulator on my engine and I simply could not run that fast over the Kase switches!"

"So you have, Fisher. You are right. I don't see how you could have done it." Thomas nodded in approval. "O.K. I will take care of this complaint."

Then Fisher, with a wise look on his face, started down the stairs. However,

accompanying him was Thomas' assistant, who whispered to Charlie: "You know damn well you put one over on the boss. He didn't get it, but I know you were running without the control on your engine—you cut it out at Race Street. Now I want you to obey that speed limit over those switches or else . . . !"

WILLIAM J. McCOLLUM of Sunbury, retired engineer on the old Sunbury-Bellefonte passenger run, remarks:

"My wife and I went over to Mount Union to see her relatives one evening, boarding the S&L at Lewistown. I saw Bucky Mertz up on the front end. Before we left the station, in came Conductor Howard Stuck to tell me: 'Bucky wants you to come up in the cab with him to watch the cab signals.' I said. 'You tell Bucky I have enough riding in the cab every day to suit me!' At the next stop in came Stuck again. 'Bucky wants you to see them signals work.' So at McClure I went ahead and crawled up behind him. The cab signals worked perfectly but Bucky wasn't satisfied. Drifting into Selinsgrove, he let her strike the S circuit pretty fast and on went the emergency. He grinned at me knowingly and crawled down off the cab to release the valve.

"Bucky was some runner, too. I went over to Lewistown to a funeral of a lodge member before the days of the speed control. That day the S&L was busy detouring trains for the Middle Division. Before I left to come back, I dropped into the trainmaster's office to pay my respects and there was Bucky on the carpet.

" 'Bucky, you were running too fast today,' said the boss.

" 'Oh, I don't know.'

" 'I know. I was sitting at the wire and got your time past every station and you were going too fast.'

" 'I don't know. I had a high-wheeled L-class, a hundred and eighty-five pounds of steam and didn't want to hold up things behind . . . but I pinched her down on the curves.'

" 'Bucky, you were still going too fast.' " That ended the interview.

Naturally, some bugs developed in the new experiment. For instance, through the Selinsgrove area the cab signals, instead of remaining at S would flick spasmodically to A, which caused some thinking on the part of the signal experts. They finally figured out it was due to stray AC current, so they commenced to comb the town for industries using power-driven machinery. A big feed mill, located just east of the depot where the trouble usually occurred, passed inspection, so the search continued.

Finally, far away down-town the railroad trouble-shooters found a badly grounded printing press. They also traced a water main crossing under the tracks near the feed mill. The problem was satisfactorily solved with orders going out for all electrical apparatus vital to the functioning of the cab signals and other parts, to be redesigned to operate on a non-commercial frequency.

Single track operation had its kinks at first. Hob Smith relates that his front brakeman opened the main track switch at the east end of Middleburg passing siding one day immediately after a westbound passenger train had passed. His train was eastbound. Hob was just on the phone getting permission from the dispatcher to occupy main track. Further up the line the passenger train was making an emergency stop as its cab signals went to S.

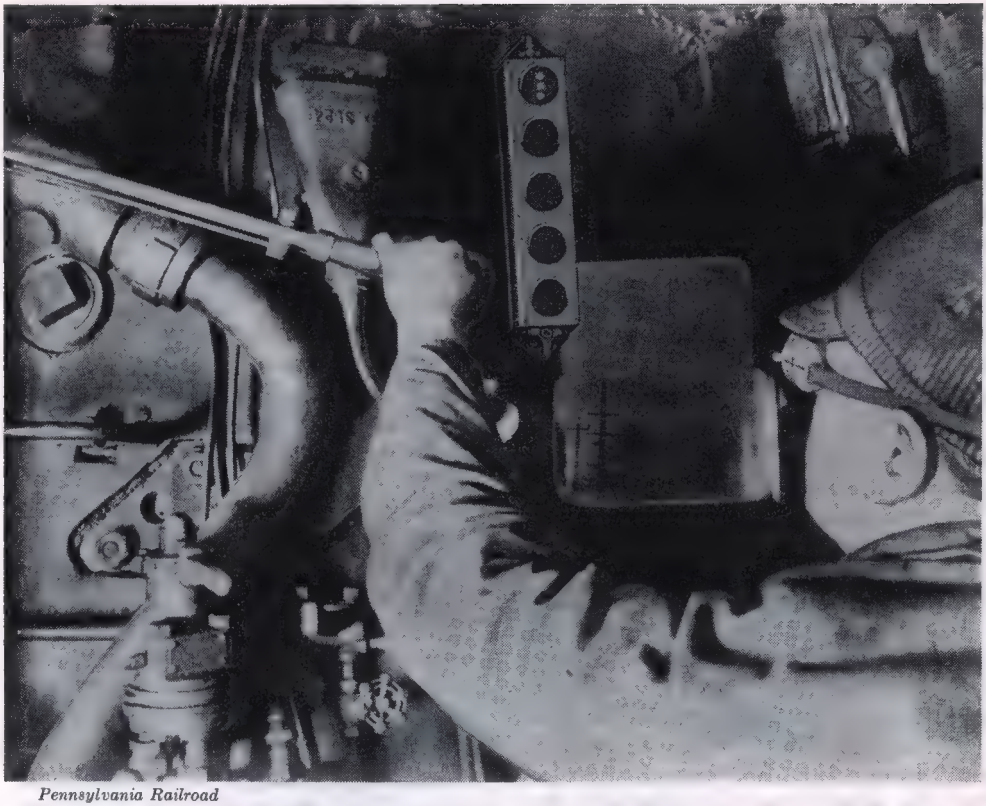
The freight crew yelled to Hob and the brakeman, who both knew what had happened, and the main track switch was immediately closed. That flicked the S back to A for the passenger, which proceeded after its brakes had been reset. This particular bug was rectified in its turn by changing certain circuit relays.

Hob Smith said he was shifting out a train in Lewistown yard one day when out came the yardmaster in a hurry.

"Can you pilot a mainline train down to Selins Grove Junction?" asked the official.

"Certainly. Call another conductor to take my place!"

"There were six trains to detour and there were only two S&L engines then



Pennsylvania Railroad

HOGGER'S CRYSTAL BALL tells him what conditions are ahead, even in pea soup fog. Enginemen soon learned to like traveling on signals, thought at first a fast runner might try to outsmart the system in order to make time

available with cab signals. Well, the train dispatcher gave us orders to run at reduced speed and be governed by signals alone. So we moved out, a block apart, the others closing in behind me at a Stop-and-Proceed signal. We had no trouble."

Signal Foreman Jewens, who had charge of the installation after it was in service, related: "One night the operator at the Junction (Lewistown) called me on the phone. 'Jewens, come right over here. We have a flock of trains to detour.' I asked him if he had enough S&L engines with cab signals. 'Yes,' he answered. All right, put one in front of each train detouring and let them go. You don't need me! And I rolled over in bed and went to sleep. I knew there would be no trouble and there wasn't."

Today two old veterans of the experiment period help S70 and S71 peddle over the S&L out of Northumberland—out one day and back the next—Conductor Carl (Bunny) W. Haas and Engineer Ed Price. Back in the '20s, Bunny was flagman and extra conductor on the passenger board, usually with Conductor Joe Downs out of Sunbury. Price was then baling black diamonds into the H6 firedoors.

Bunny Haas remembers a special he had one day out of Sunbury. It had Superintendent Allibone on board.

"At Paxtonville we received orders to run wide open against another special out of Lewistown. L.W.A.—that was the boss—who was always excitable, was a bit skittish about that order and went up front to the engineer and said to him, sort of under his breath: 'Take it a little easy!'"

"Notwithstanding, the front end opened

her up and we went hunting for the eastbound special. Well, Allibone was very much excited but we had our written orders and that was that. Anyhow, when we hit Painterville, things began to click. Our cab signals jumped from A to R and then to S. We slowed down to 15 miles per hour and soon we saw the other extra coming towards us—and it was also going 15 miles per hour."

Bunny had a good laugh telling that story. Pressed for some more recollections of those exciting incidents, he smiled and took another twist of tobacco.

"I was flagging for Joe Downs one night on 8854, with Eddie Matthews ahead. We had a scheduled meet with 8855 at McClure, but you know we had really thrown away the schedule and Book of Rules, so to speak, when the test started. Anyhow, pulling in at the west end of McClure, I shut the switch and we ran on down to the station. The passing siding those days was about half a mile long. After we had unloaded and loaded passengers and taken care of the front end business, Joe signaled Eddie to pull ahead to clear the street crossing alongside the station. Then Joe and I walked back to the station right at the rear of the train and started to talk to Agent Rauch. Suddenly the telephone was ringing and the dispatcher was saying: 'Riddle on 8855 is at the east end of Raubs Mills on the phone asking why they have to run with an S signal. He is losing time. Are you fellows in the clear?"

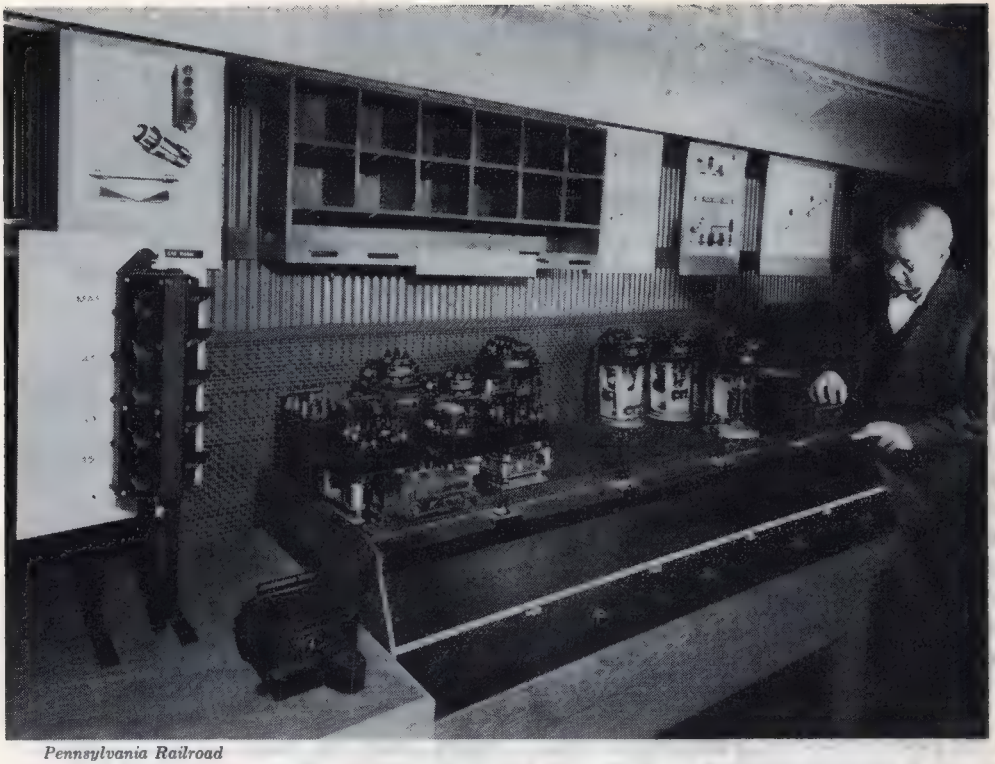
"JOE LOOKED at me and said: 'Bunny, run down and see if Ed is out too far.' So down I ran and yelled at Eddie to look if he was out beyond the clearance circuit. 'Jiminy Christmas,' yelled Eddie, and out of the cab he went. He found his engine was out too far. In a second, he was backing our train and in a few minutes 8855 went by at full speed."

"Oh, I could go on and tell of dozens of such things. One morning I was conductor on No. 8749 out of Sunbury at 4:10 a.m. Leaving Selinsgrove we picked up an S indication and slowed down to 15 miles per hour. This was bad as we had workmen for Burnham Steel Works and we had a close connection in Lewistown Borough with the Milroy Branch train. I called up the dispatcher when we reached Clifford and told him the story. You know he controlled all the signals east of Beavertown. There was nothing in front of us when I said to him: 'Look and see if you don't have a button out on your desk!' He yelled back 'NO!' So we pulled ahead and dragged along. I called up again and got the same answer, so we dragged some more till we reached Beavertown with the S signal still staring us in the face. But from there on, we had no more trouble and started to make up some of our lost time. Several days later I heard on the q.t. that one of the dispatcher's buttons *had* been out. That was one on the office end."

We kept talking along of these two-and-a-half years that meant so much to present-day railroading and Bunny recalled a run that was especially printed on his memory.

"I was conductor on 8854 one night and leaving Middleburg the cab indication went to R. Passing Kreamer, 5 miles further, the R changed to S. We were then going up Clifford hill and one of the passengers started to fuss and fume and even to swear at the slowness of the train. You know, you have to be careful with the public and I remarked to him that we were traveling on the safest piece of railroad in the world, which of course, got quite a rise out of him. But he kept on with his sarcastic remarks and still fussed about the slow train and so on. When we reached Selinsgrove, I went into the office and reported the S speed we had been running under. There they told me the reason.

"After the train had started, I went back to the disgruntled passenger and said: 'Brother, I told you before that we are governed by electrical apparatus on this track. It might interest you to know that if we had been running at our regular speed, you and I might not be alive now. We ran over a broken rail up on the hill.'



Pennsylvania Railroad

WORKING MODEL shows how cab signal system operates. Three horizontal lights with a single light below (just in front of demonstrator's right hand) indicate "stop and proceed not faster than 15 mph. prepared to stop short of another train." Three diagonal lights indicate "approach", with a 30-mile speed limit. Three vertical lights indicate "clear". To the left of model layout is actual cab signal indicator; at lower left is engineer's acknowledging switch

I didn't hear any more wise cracks from that passenger."

In other words, soon after the test began, general satisfaction prevailed and the trains moved back and forth with little delay. Trainmen soon liked running on signals instead of stopping for orders to meet or pass another train or to run ahead of a delayed train. They had confidence in the system's practically fool-proof construction and operation.

The fact that fog, rain, snow or sleet made no difference in the perfect operation of the system was paramount, the fog factor being especially important in the river areas at both ends of the S&L. In fact, trains could keep their schedules even when the visibility was limited to the smoke-stack.

So when the curtain was rung down in 1926, the experiment was considered money well spent. It was the forerunner of similar installations on hundreds of miles of highspeed track in all parts of the country.

Broken rails, damaged and broken electrical and mechanical parts, cars, and even trains improperly cleared on side tracks and other dangerous conditions were picked up by the cab signal system, and all these things went a long way towards proving its worth.

What about the S&L today?

You cannot find a trace of this wonderful experiment, except an occasional bond wire along its tracks. To all appearances it is just another piece of railroad.

Its honorable past gone, it is today, in spite of its strategic position in the rail picture of the Keystone State, seemingly maintained and operated like a third grade freight line.

POWER CONTACTORS

Drawings by **H. B. COMSTOCK**

These Ingenious Devices Make Possible Transition of Diesel Motors From Series to Parallel, Or Vice-Versa

LAST MONTH, in discussing the diesel power circuit, we mentioned that there is a low-voltage control circuit, which not only operates the switches feeding high-voltage juice to the traction motors but also takes care of the many auxiliary machines found on the locomotive. While it would seem logical to begin the story of this control circuit with a description of its overall pattern, there is one device in the hookup which is so important to both major circuits that it would be well to consider it first. This is the *power contactor,* a number of which are used on every engine to change the traction motors over from *series* to *parallel* operation, or vice versa.

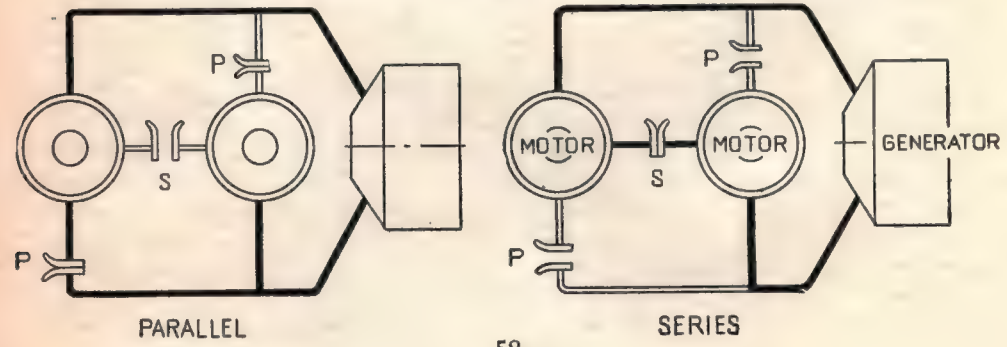
In our articles on transition and the power circuit we described the purpose of this changeover. The location of the power contactors, themselves, is shown in simplified form in *Drawing 1.* The series hookup involves the opening of the two *P,* or parallel contactors, and the closing of the single *S,* or series contactor. This provides a path for the full generator output to pass through all motors before returning to the source of power.

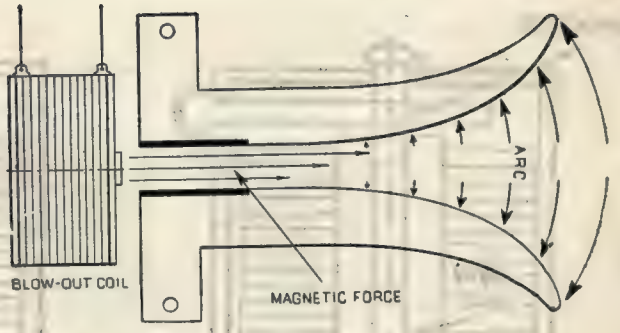
If a change to parallel is desired, the *S* contactor must be opened, and the two *P* contactors closed. We then have a hookup which divides the generator output, sending only part of it to each traction motor.

Were we dealing with electric lights in a house circuit, instead of motors in a locomotive, we would also have switches to turn on and off. And because the time element would have little importance, we would snap off each switch manually, independently. But on a diesel, this is impractical. What is wanted is the split-second operation of a number of power contactors, responding in unison to a single movement of a lever.

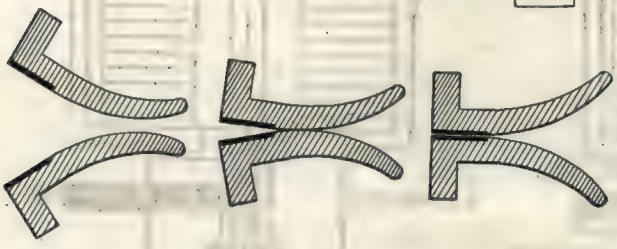
There is another complication to be considered. When transition is made the locomotive is generally under heavy load with a great deal of current being generated. Opening or closing the contactors under these conditions cannot be done

1 **POSITIONS** of power contactors for series and *parallel* operation of the traction motors





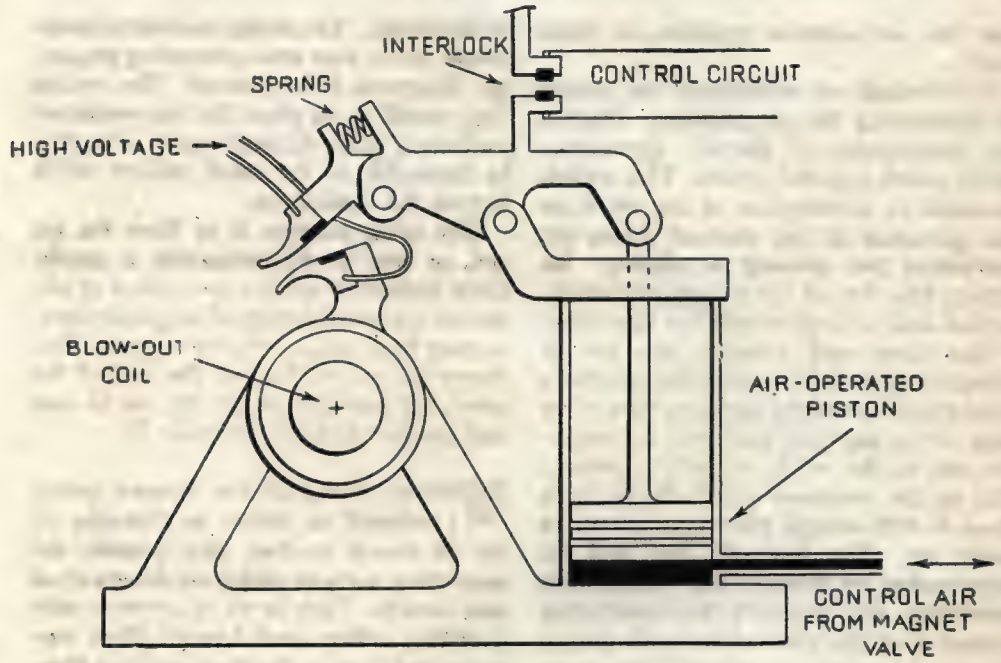
2 **ARC** between contactor points is "blown out" by surge of magnetic force set up by an electro-magnet

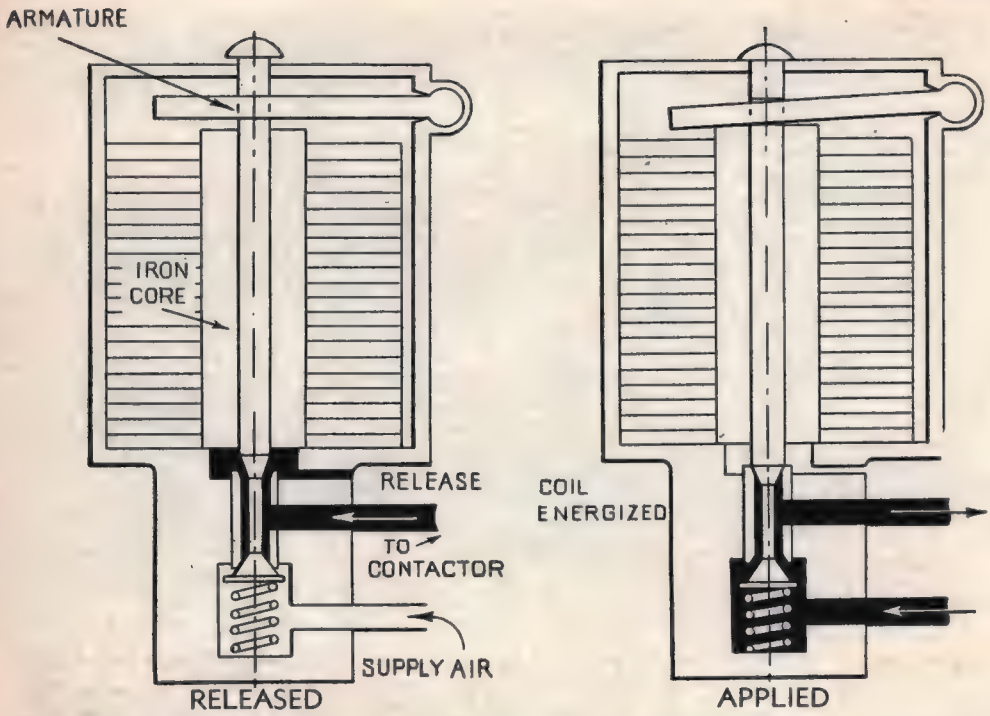


3 **ROLLING ACTION** of contactor points brings *breaking point* of switch well out beyond flat surfaces, protecting them from damaging effect of arcs

without producing powerful arcs, or, in other words, damaging passage of high-voltage current through the air-gap between the two points of the contactor. If you have ever seen the results of arcing on the commutator segments of an automobile generator you can imagine what would happen in the case of 600-volt, high amperage current. The heat of the arc would either burn the contactors out or

4 **GENERAL ARRANGEMENT** of air-operated contactor, showing its principal parts, with the exception of the magnet valve





5 MAGNET VALVE is in released position when coil is not energized, with its spindle valve moved upward by spring pressure. When current passes through the magnet, an iron armature forces the spindle downward, sending air to the contactor cylinder

fuse the two surfaces together, in short order.

Last month we mentioned one means of overcoming the arc problem. That is the introduction of the *GF* (generator field) switch into the circuit. This switch provides an interruption of current from the generator at the moment when the contactors are opening or closing. Its action, like that of the power contactors, is tied into a single transition operation.

But there still remains the job of eliminating arcing between the relatively close-spaced contactor surfaces, even when they are in full-open position. So instantaneous is the whole transition process that as the contactor points break apart there is still enough current to create an initial arc. This heats the tips, and the surrounding air becomes hot. Under such conditions the normally non-conducting character of the atmosphere undergoes a change. It is now charged with tiny negative particles, making it a good conductor of electricity. The arcing continues, maintained by its own heat-generating property. How can it be broken? The easiest way would be to place the two contactor sections a great distance apart. But this is impossible in the small cabinet which houses the equipment.

The other solution is to blow the arc out, as you would extinguish a candle. Only instead of using a cross-blast of air, we use a powerful surge of magnetic force, created by a coil, or electro-magnet. This forces the arc out beyond the ends of the contactor sections, where the air is cool and non-conductive *(Drawing 2)*.

WHEN TWO of the contact points (designed as shown in *Drawing 3)* are in closed position they provide flat contacting surfaces which are always clean and smooth. They break or separate with a rolling action, well beyond these surfaces, and it is in the third position illustrated that the blowing-out process takes

place. The tips get hot and burn slightly, but this does not affect their performance.

Most contactors are electro-pneumatic, making and breaking in response to a piston operating in a cylinder under air pressures approaching 100 pounds *(Drawing 4)*. The air is admitted and exhausted by magnet valves in the control circuit, and its high pressure insures quick action and a firm union when the switch is closed, eliminating another possible cause of arcing.

Operation of the magnet valves is shown in *Drawing 5*. The main element is an electro-magnet with a hollow iron core. Through the hollow section passes a spindle valve which, in turn, has a hole drilled through its upper portion. The base of the spindle rests on a spring, and when no current is passing through the magnet this spring forces the valve upward, providing a release passage for air trapped in the contactor cylinder. But when current is applied to the magnet, an iron bar or armature passing through the hole near the top of the spindle is drawn down, moving the valve against the spring and setting up a route for air to enter the cylinder. The button at the head of the spindle valve provides for hand testing of the mechanism during locomotive inspections.

The contactor cylinder and piston are simple in design, with a lever above them to transmit motion to the upper or rocking arm of the switch. A hinge under spring tension insures equal distribution of pressure all along the flat, contacting surfaces. A secondary interlock switch is also installed on the lever to deliver current to other coils which control the order of contactor movements, and the whole device is housed in a heat-resisting shell.

Southern Pacific

DULY NOTED. Ellis Lucia's July photo story, "SP's Hustling Shastas," drew praise from the *Oregon Journal*, Reader George W. Miller of Portland tells us. The southbound *Shasta Daylight* leaves his hometown early each morning, makes Klamath Falls, the big fuel stop in the afternoon, *above*, and arrives in San Francisco late the same night

Information Booth

Conducted by ALFRED COMSTOCK

Q *I saw a boxcar lettered La Salle & Bureau County Railroad in a B&O freight. What information do you have on this railroad?*—Harold Buckley, 216 Leighton Avenue, Silver Spring, Maryland.

A Chartered August 29, 1890, under the laws of Illinois, this road was built in 1892 and opened in October, 1893. It is operated by the Matthiessen & Hegeler Zinc Company as a switching property. This railroad is operated for freight service only, extending from La Salle, Illinois northwestward to Ladd, with a total trackage of 15 miles. Connections are made with the Illinois Central at Midway; the Chicago, Burlington & Quincy at Hegeler; the Chicago & North Western at La Salle Junction, and with the Illinois Division of the New York Central at Ladd.

The line is standard gage, with 80-, 90- and 100-lb. rail. Equipment consists of three locomotives, (one propane-electric and two diesel-electric road switcher units), and two 40-foot, 6-inch, 50-ton boxcars, numbered 1001 and 1002. These freight cars are used in interchange service. Connection is made with the Rock Island at La Salle via the Illinois Central. The road has 19 employees and eight stockholders. Offices and headquarters are in La Salle.

* * *

Q *Could you give me some details on the renumbering of Pere Marquette locomotives into the Chesapeake & Ohio?*—George J. Capdevielle, 2608-64th Avenue, Oakland 5, Calif.

A We have the number changes on a few of the Pere Marquette steam engines. Last December the C&O's Pere Marquette District dumped the fires on its last steam locomotives. Operations were dieselized with 94 yard engines and 124 road units, all EMD's except for 3 Alco-GE 600-horsepower switchers. The renumbering into the C&O is as follows:

P M	C&O	P M	C&O
Mikados		**0-8-0 Switchers**	
1015	2354	244	384
1016	2355	1310	340
1033	2372	1315	345
1036	2375	1325	355
1041	1060	1403	362
1043	1062	1406	365
1047	1066	**Consolidations**	
1095	1070	604	753
1099	1074	605	754
Berkshires		613	762
1201	2685	902	726
1203	2687	**Santa Fes**	
1206	2690	1101	2975
1210	2694	1107	2981
1215	2699	1109	2983
		1114	2988

* * *

Q *Does it cost extra fare to ride in the Vista-Dome cars, or are they open to anyone?*—John B. Weaver, 101 Exeter Street, Providence, R. I.

A There is no extra fare charged for riding in the Vista-Domes.

* * *

Q *Please give me some facts on the Mason & Oceana Railroad of Michigan.*—Robert Garasha, 4102 Argyle, Chicago 30.

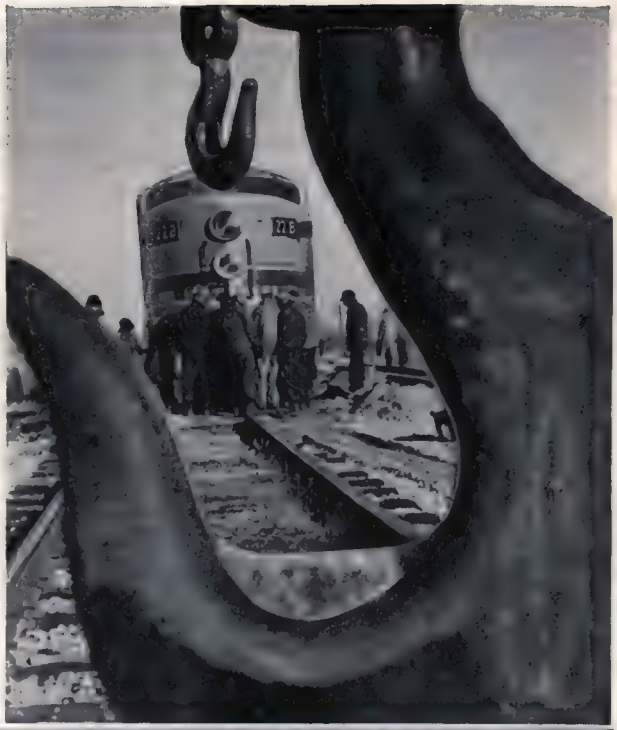
A The Mason & Oceana was a 3-foot gage line, chartered August 9, 1886. The road was opened between Ludington and Stetson on January 20, 1888; extended to Goodrich, July 1, 1901, and to Maple on June 1, 1903. The entire railroad ran between Ludington and Beaver, a distance of 35 miles.

Poor's Manual of 1907 lists 5 locomotives, 1 passenger car, 1 baggage car, and 80 freight cars owned by the little carrier. The freight equipment consisted of 5 box;

THE BIG HOOK

MOST BIG RAILROADS keep a wrecker handy at points dotting their systems so they can get to the scene of an accident in the shortest possible time, and, as with boxcars, they use their neighbor's *Big Hook* when necessary. When a Milwaukee train was wrecked recently by a broken rail near Ottumwa, Ia. the CB&Q wrecker was sent out. Workers get the derailed train ready for the hook, *right*, and the wrecker pulls the train back onto the track, *below*. Actually, it isn't as easy as all that—the wreck occurred at night and the operation consumed 24 hours before the *fast mail* was put back on the rail

Henry E. Bradbury, Des Moines



15 flat, and 60 loggings cars. The line was laid with 30-pound steel. General offices were in Ludington. This railroad was used primarily for logging operations of the Butters Salt & Lumber Company.

On January 31, 1908, the Grand Rapids & North Western Railroad, incorporated in Michigan, acquired the entire right-of-way, grades and terminals of the Mason & Oceana. The Girard Trust Company of Philadelphia held all the $100,000 capital stock of the M&O as trustee for the GR&NW. The Grand Rapids & North Western proposed to standardize and extend the Mason & Oceana into Ludington and Grand Rapids, and establish a line of car ferries with terminals in Milwaukee and Manitowoc. The company's line from Grand Rapids to Ludington was graded and fenced for over 40 miles, but construction work was suspended in June, 1914.

At Ludington the company owned approximately 1¼ miles of deep water frontage and extensive terminal room and had under construction three car ferries. The company acquired control by 99-year lease of a large terminal in Milwaukee, with approximately three-quarters of a mile of water frontage. A contract for a similar term was made with the Chicago, Milwaukee & St. Paul Railway, providing for the joint operation of this terminal and for the division of rates. No portion of the company's line ever operated, and the project died in 1929.

* * *

Q *Please furnish some particulars concerning the new line of railroad which the Canadian National is planning to build in British Columbia?*

A On June 12, 1952, the Canadian National Railways was authorized to build a new line from Terrace, 94.6 miles east

NARROW-GAGE FREIGHT LINE. The 3-locomotive, 3-foot gage East Tennessee & Western North Carolina Railroad, an 11-mile pike in Tennessee only, operates from Johnson City to O'Brien; connects with the Southern and the Clinchfield at JC. ET&WNC *Ten-Wheeler* No. 11 at Elizabethton, 2 miles short of O'Brien, admits to 42 years—Baldwin built her in 1910
Richard J. Cook, Cleveland

Steve Maguire
COAL AND WATER. The Meadow Creek Coal Company's *Consolidation* 142 halts for a thirst-quencher near Nashville, Tenn.

of Prince Rupert, on the old Grand Trunk Pacific mainline south to Kitimat, where the Aluminum Company of Canada is constructing a huge water power project and aluminum reduction facility.

The 46-mile branch, estimated to cost $10,000,000, or $217,391 a mile, will cross the Skeena River at Terrace on an 8-span bridge 1013 feet long. Four other rivers will be bridged by smaller spans. Canadian National hopes to have the line ready for operation by the end of 1954, assuming there will be no delays in delivery of essential building materials. In addition to serving the new aluminum project, the new CNR rail line will open up substantial timber resources in Canada's most westerly province.

* * *

Q *Who was Nellie Hand?*

A She was a Garden State Kate Shelley. Walking to her home in Trenton on the dark and stormy night of December 11, 1905, she noticed a shed blown down on the Philadelphia & Reading tracks. Grabbing a lantern from a nearby crossing, Miss Hand dashed up the tracks and furiously waved at the engineer of the Trenton-to-New York train. The express screeched to a halt but the heroine disappeared into the gloom. Five days later the railroad located Miss Hand and offered her a reward. She refused the money. "Anyone would have done it," she said.

* * *

Q *Twelve-Wheeler locomotives acquired by the Southern Pacific in the late 1880s were equipped with a water brake. What was the purpose of this device? How did it function?*

A Heavy construction of the valve gear on Espee's 4-8-0s necessitated the addition of an auxiliary water brake in addition to air and hand brakes on some locomotives. These La Chatelier water brakes worked on the engine only. The heavy valve gear called for the application of power reverse when the engineer wanted to reverse his engine. This was worked from hot water at boiler pressure taken from the firebox above the mud ring, with the lever to operate it secured to the reverse lever.

The La Chatelier brake flashed water

Walter Voelker, Miami, Fla.

THE CITY OF MIAMI crosses the Little River, only 10 minutes from the Miami depot, end of the run for the Florida East Coast Railway's Chicago streamliner. Hidden by the lush setting are several $30,000-and-up residences

into wet steam with the engine reversed, and the pistons acted as air compressors. These brakes lasted some 20 years before being discarded.

* * *

Q *What is the largest mail train in the United States?*

A This distinction goes to New York Central's West Division Train 14, carrying three full Railway Post Office cars and more than 25 clerks from Chicago to Cleveland. The New York & Chicago, of which this run forms a part, is also the largest route in personnel, with over 1000 clerks on all trains (all divisions), and operates the largest RPO cars anywhere (80-foot, 20-foot storage).

Until 1949, Train 180 of the New Haven's Boston & New York, a solid mail train, held the record. It had more clerks, the same number of cars, and covered the entire run. It now has two full and one 30-foot RPO car, plus many storage cars, as does New York & Chicago 14.

* * *

Q *How many miles of jointly-operated railroad track are there in the United States?*

A Approximately 30,000 miles of track on which more than one railroad operates, making the net track mileage in the U. S. approximately 380,000 miles.

* * *

Q *Where was the searchlight type of signal first used?*

A On the Grand Trunk Railway in 1920. This signal shows the approaching engineman a beam of light projected through one strong, clear lens by tiny green, yellow or red lights. They are so arranged within the signal that each one of them shines through the searchlight as it is moved into position by the signal mechanism responding to conditions in the track circuit.

* * *

Q *Let's have a brief account of the Old Colony Railroad's Dude Train.*

A Started in 1884, the *Dude Train* was an extra-fare, three- or four-car private flier for subscribers only. It left Boston at 3:00 p. m. on summer afternoons and dashed over the 72 miles to Woods Hole in an hour and a half, so that bankers and businessmen, closing their roll-top desks a little early, might eat supper at the Sea View Hotel on the Vineyard as early as 6 o'clock, if they chose. This express, with its golden yellow cars, operated until the U. S. Railroad Administration of World War I abolished it in 1918.

* * *

TOM MOHR, C&NW sectionman, 2250 West Giddings Street, Chicago 25, and H. E. Inch, 1301 South Ohio Street, Sedalia, Mo., have called our attention to some errors in the July *Information Booth*, page 68, concerning the 4-8-2s with the highest drivers.

Inch states that Missouri Pacific *Mountains*, 5321-5327, with 75-inch drivers, one inch larger in diameter than those on the Baltimore & Ohio and Rock Island locomotives, have the largest drivers of any 4-8-2s. These engines, incidentally, have 26½x30-inch cylinders; 225-pound pressure; 53,720-pounds of tractive force, and weigh 370,000.

Mohr states that B&O 5000 and 5001 are 4-6-2s; the correct numbers are 5500 and 5501, and T-1 class Engine 5510 was scrapped in 1951. The Chicago, Burlington & Quincy has 74-inch-drivered *Mountain* types, too, he says. Below are the specifications:

Class	Numbers	Cylinders	Drivers	Pressure	Engine Weight	Tractive Effort	Builder & Date
B-1	7000-7007	27 x 30	74	210	381,400	52,750	Lima, 1922
B-1a	7008-7020	27 x 30	74	210	376,440	52,750	Baldwin, 1925

Brownies Off The Record

LARRY McCARTY

My train was doing about forty when the papers hit that poor fellow . . .

BACK WHEN I was running as Express Messenger and Train Baggageman, it was the rule to give out brownies for every little mistake a fellow made. It seemed to be the rule among the younger employes to see how many of these cute little siggers they could accumulate in a year and still hold on to their jobs. My old boss in the express office where I started out as a driver once told me that getting brownies didn't always mean that you were no good. I collected ten of them the second day I was on the job. I was sent out on a delivery run and delivered a suit of clothes to a doctor in town. The package was a C.O.D., but I paid no attention to that. I collected the express charges and that night when

I checked in I was short twenty dollars, the C.O.D. charges on that suit. I rushed back to the doctor's office but he had gone home. He lived way out on the edge of town, too, and it was getting late.

Anyway, I found the doctor at home and he gladly paid me the twenty dollars. I went back to the office where I found the old boss fuming and fretting over my delay. He wanted to get home for supper.

This fellow was a great one to put everything down in writing. We had no typewriter in the office, and everything that happened during the day had to be written down in longhand and sent into the head office at Salt Lake City. These letters all had to be copied in a big tissue paper book so we would have a record of everything that went out.

The copying of all those letters and waybills and other reports was part of my job as driver and delivery man. I should have been put down on the roster as jack of all trades. I even had to keep the coal box full in the winter time for the big stove we had in the middle of the front office. After I had finished my delivery work and taken a load of express to the depot for the night man, I would go back up town, turn my horse and rig into the livery barn, get my supper, then go back to the office to do my copying.

As I was doing this I could read all the letters the old man had put out during the day. Some of them were quite interesting. Especially the one telling about the way I had failed to collect a C.O.D. and adding that in finally making the collection both he and the poor old nag had been over an hour late for their suppers, on account of having to wait for me.

In a few days orders came that I was to be presented with ten brownies, not because I had failed in making the C.O.D. collection, but because I had mistreated the horse.

It was then that the boss told me about brownie collecting as a hobby. It was his idea that if you got no brownies you were doing no work. But if you collected a few now and then it was a sure sign that you were doing something, even though it was wrong. In the course of time I learned this was not always a good rule to follow.

At long last I was promoted to Express Messenger Helper. How important that title looked on the letter I received from the head office! All past errors were now forgotten, my collection of brownies disposed of and a new start was to be made.

I rode my new pass to Portland, reported to the route agent in charge of the district and was assigned to the main line as a helper to one Mr. Booth, a veteran messenger.

This was just before Christmas. Well, I made that first round trip without an error, or so said Mr. Booth. But on the next trip, I began to collect again. I'll tell you how it was.

For quite some time I had been wondering what it would be like to shoot off one of those old sawed off double-barrelled shotguns that every messenger carried and that nearly every office had standing in a corner. I found out the hard way.

Like all messengers, Booth carried both a shotgun and revolver on every trip. In passing, let me say that this fellow was a great practical joker. But some of his stuff was a little extreme, I thought.

Our second trip with me as able assistant took us out of Portland on the morning of New Year's Eve. Booth had not wanted to go out on this trip, preferring to remain in Portland for the night's festivities. But there was no other man available, so he had to go. He was crusty all day, but around midnight as we were nearing the end of our run and the old year was also mighty near to bowing out, Booth got a bright idea. He said to me, "Kid, let's you and me do a little celebrating around here in about ten minutes. What say?"

Of course, he being my boss, I could do nothing but agree.

Booth picks up that old double-barrelled shotgun, hands it to me and says, "OK boy. Listen. Just at midnight, I'll open both side doors. You stick that gun out into the night and let go with both barrels. I will fire my short gun out the other side. We'll show 'em something, eh?"

Well, it didn't look good to me. I had never fired a shotgun before, but as I say, I had often wondered how it would feel. I wasn't long finding out.

Booth kept looking at his watch. We were out in the open country, bowling along around forty, the night black as pitch, the only light being that from the engine when the fireman opened the fire-box door to throw in a scoopful of coal.

We had both side doors open. "Midnight," shouted Booth. "Let's go!"

We went. But in my excitement and hurry to get there right on the minute, I accidentally fired both barrels of that old gun. It was pointing straight up and was not nestled snugly against my shoulder as it should have been.

When I came to about fifteen minutes later, I found the engineer and fireman, the conductor, two brakemen, a couple of Pullman porters, and all the mail clerks from the car ahead gathered around me. I was lying on the floor, a suitcase under my head for a pillow.

Straight up above me I caught a glimpse of stars. I tried to get up but a stroke of pain in my shoulder kept me down. "What's that up there, Booth?" I said, as I lay there gazing through a four-foot hole in the roof of our express car.

Well, if I could talk, I must be all right, they thought, for they all began to laugh. But I didn't see anything funny about it. They had me uncovered and one of the Pullman fellows was rubbing turpentine on my shoulder.

"So," said the conductor to Booth, "you got the notion you would celebrate, did you? Well, this was a hell of a way to do it. Look up there. A new car just out of the Albina shops, with a six-foot hole in the roof. The kid here nearly killed. Train delayed for an hour. Cripes, ain't this goin' to look nice on my trip report."

Grand result: Booth gets one hundred brownies, I get fifty, also two weeks off without pay, a bill from the car shops for sixty dollars to pay for repairs and an hour-long session in the head office where

"BILL'S A GREAT DATE, but he's a square about his hair. He's got all the signs of Dry Scalp! Dull hair that a rake couldn't comb . . . and loose dandruff, too. He needs 'Vaseline' Hair Tonic!"

Hair looks better... scalp feels better... when you check Dry Scalp

NEAT SOLUTION, this 'Vaseline' Hair Tonic! Just a few drops a day check loose dandruff and other annoying signs of Dry Scalp . . . make your hair *naturally* good-looking. Contains no alcohol or other drying ingredients . . . it's economical, too.

Vaseline HAIR TONIC
TRADE MARK ®

Listen to **DR. CHRISTIAN,** starring **JEAN HERSHOLT,** on CBS Wednesday nights.

VASELINE is the registered trade mark of the Chesebrough Mfg. Co., Cons'd

they try to explain to me the proper handling of firearms.

But there were compensations. For while I was off without pay they gave me a pass home and later on refunded the thirty dollars I had dug up to pay for that roof. They never did refund Booth's thirty, though.

MY COLLECTION of brownies was growing and soon I would add a few more. I was promoted to regular messenger, my run to be on a 70-mile branch of the main line, up in the lonely plains of eastern Oregon. My first trip up, I was so tired that I went to bed in the one hotel in town without telling anybody who I was. I woke up next morning to find that the train crew had been roaming around looking for an express messenger so they could leave town. Result, we pulled out of the station over an hour late, and got down to the junction an hour late. The mainline train had been standing there for an hour waiting for us. One hundred brownies. Advice as to the proper method of conducting my affairs so that in the future there would be no more delayed trains on my account. Get an alarm clock.

Oh well, what's a brownie more or less. I was still young. I could get me a job herding sheep or something. Why should I worry.

At long last I was promoted again, this time to the main line. I had arrived, I was now an express messenger in my own right. The boss smiled as he handed me a box of report blanks, a shotgun and revolver. I went uptown, bought three army blankets to carry as my bedroll and gave the old fellow I was replacing a dollar for his old armchair and train box.

Next day I got on the eastbound limited. Somewhere up in eastern Oregon that afternoon at a junction with the Spokane Branch, a man stepped into the car. I had never laid eyes on him before. And I didn't like the looks of him. My revolver lay on top of the big car safe. He noticed it, then looked at me. "Why haven't you got that gun on?" he demanded.

"What business is it of yours?" I said.

"You know who I am?" he asked.

"Never saw you before. What are you doing in my car anyway?"

"I am travelling route agent for this district. On inspection duty. Put that gun on and give me a full written report why you do not wear it on duty as required."

I put the gun on. Or started to. In so doing, it slipped out of the holster, fell and struck the hard floor. It went off and one finger of the route agent's left hand became missing. It was a clean job if I ever saw one. He grabbed his handkerchief, wrapped it around the bleeding stump and got out of the car.

When I got back to Portland there was a letter from the brass. An hour-long lecture. One hundred brownies. Two weeks off without pay.

As I started to leave the office I had an idea. I came back to the desk where sat the brass. "Well?" he said.

"Er, er, do you think I could have a pass up home to see my folks?"

He nearly fell out of his chair, but he turned around to his secretary and said, "Make out a pass for this fellow, Mary. Two weeks. Maybe we can get rid of him for awhile. And cut down that last bunch of brownies to fifty."

I continue running messenger. And as I ride my express car back and forth from end to end of my run, I meet folks and make friends. Those grand people who lived there in the sagebrush along the right-of-way were really all right. Could I get this for Faye while I was laying over in Huntington? Could I get Sam a bottle of horse liniment? Sam can't get to town and Mary is sick with the colic. Mary is a horse. Could I buy some medicine for Mrs. Bennet? Ed is down in bed sick and there's no one to go for things.

One bottle of horse medicine, one bottle of something for Mrs. Bennet's husband. The owner of the horse and Mrs. Bennet's charming young daughter both meet the train on my return trip. Yep, I got it. But I got something else too. That cute little daughter of Maw Bennet's. Very

cute. Ever see inside an express car, honey? Well, climb up and look around. We will be here for quite a while because we have to wait on that eastbound freight.

But it can't last. The freight whistles coming into the side track and we get the highball from the connie. I hand out the package to the farmer with the sick horse and give Mollie the other one. She gives me a delicate little hug. We are on our way west.

On my next trip east a week later I get a full report from Mollie. The medicine I had given her when she had to get out of my car in such a hurry was the horse medicine which I should have given to the farmer. And his stuff I had given to Mollie. Result, Mollie's dad recovered and was fit as a fiddle. But the horse died. No brownies this time.

But they still had a few for me up there in the head office.

They are building a new bridge across Burnt River east of Baker, Oregon. Every day the train picks up a side or two of beef for the cook house there at the construction camp. This beef has to be dumped off on the run as we do not stop. In due course it is my turn to pick up the beef, two big heavy sides of it. It is Saturday, and the camp will need a lot of beef before Monday afternoon comes around.

So I watch things pretty closely. We near the construction camp and I open my side doors. A quarter of beef lies near each one and they are heavy, believe me. I shove off the one on the camp side of the car, but seeing a smart-looking lass standing there waving at me, I forget about the side of meat in the other door till we go around a bend a mile from camp.

Well, it is a little late but I heave it out anyway and it goes tumbling along for fifty feet or so before it stops.

The boys back there in camp are getting hungry again and this is Sunday now and there won't be any meat on today's train. They call up the butcher down at Baker, who says, "Sure, I sent you fellers two sides. Take a look for it along the track. Maybe that fool messenger forgot to put it off. Call me back."

They do look and they do find—a bone or two, all that's left from that side of beef. The coyotes must have done pretty well for themselves last night.

BACK IN PORTLAND again, and up in the boss's office. Fifty brownies. Get back to work, and watch it, boy.

There is another girl who watches the train go by. She lives on a little farm right close to the track and often comes down to the fence to watch us pass. She is cute. So, I get the habit of taking a Sunday paper out of one of the big packages that are supposed to be delivered along the line. Every week I toss off a big Sunday paper to the girl. She is always there waiting. One day she has a big collie dog with her. When the train got up close he broke away and started chasing it and as I threw off the paper it hit the dog right in the middle. He turned over a couple of times and started for the house, but he forgot the barb-wire fence. He dashed into it at full speed, cut open his throat and soon bled to death.

So much for that. No brownies, but I was sorry about the dog.

At another place we had to throw off three big bundles of papers every Sunday morning. We would stand in the open door and when we got about a hundred feet from the station, we would let go. Then we'd grab another bundle. We had to work fast and didn't have much time to see if the station platform was clear. It was fun to watch those bundles roll; quite often they'd break open and fly all over the place.

We were going along about forty, one Sunday morning, when I let my first bundle go out the side door. The second one followed right after. But just as I let the third one go, a fellow carrying a suitcase walked around the corner of the depot, and that bundle of papers really went to work. The fellow went rolling across the dirty platform and his suitcase busted open and rolled under the wheels of the fast moving train.

When I got to Huntington I wired back to see if the man had been hurt. I was

mighty glad when I got an answer saying no he wasn't hurt but he was damned mad and the suitcase containing two new suits and a bottle of rye and other necessities was a total loss. He presented his case to the railroad but they sent a smart lawyer up to see him and all he ever got was the price of the two suits and the suitcase. They held that I was not at fault because I was doing my duty, while he had not used due precaution in approaching a train that was travelling forty miles an hour. No brownies. I bet that fellow looked twice the next time he came around the corner of a station.

My old-time friend Booth, who had caused my downfall with the shotgun that New Year's Eve, also taught me a trick with a keg of beer. Now I had never taken a drink of anything stronger than soda pop when I went on the road. But one time during the hot summer when Booth and I were caught up with our work old Number One was bowling along over the bumpy rails and we were sitting there admiring the scenery from our open side door, when Booth had a brilliant idea.

We had taken on ten or a dozen kegs of beer down at Baker, as there was a brewery there at that time and they always had a load of beer for every train.

The kegs were sitting there on the car floor ready to be unloaded at various little places down the line. Booth kept looking at them and then at me. Pretty soon he said to me, "Mac, can you keep a secret?"

"Reckon so," I answered. "Why?"

"Well, I'm dry as a fish out of water. Let's have some beer. That Baker beer is sure good stuff."

Booth got up and went to work. Tools for this trick are a claw hammer, an eight- or tenpenny nail, a pocket knife and a small piece of wood.

And here's all you do. First Booth pulled out a few of the little nails that were driven into the keg to hold the hoops on. This would loosen the hoop on one side so it could be raised about an inch. Then he would drive the nail into the keg so the hole would not show when the hoop was brought back to its regular position. Then he handed me our five-pound lard pail bucket. When Booth pulled out the nail the cutest little stream of beer you ever laid eyes on spurted out and I caught it in the bucket. When we had enough beer Booth drove a little piece of wood into the hole where the nail had been, replaced the hoop and drove the hoop holders back where they had been.

And I want to mention right here that that stolen bucket of beer did taste mighty nice that hot day. So nice that in due time, when I had a car of my own and was the supreme chief within it, I often played this trick on some unlucky keg of beer. But I did it once too often.

ONE HOT afternoon when I had nothing to do and the head brakey and the con were both in my car and we were all chewing the fat about this and that, I decided it was a good time for a treat. All the trainmen were wise to the trick, so I got to work and in no time at all we were standing there by the door enjoying our beer. But not for long, for the end door opened and in walked Mr. Burch, my boss, who was route agent for that division. He had been riding back in a Pullman and the con had forgotten to put me wise.

Well, this fellow Burch was a mighty fine old scout. He sized things up, looked at the keg of beer still standing there with my tapping tools on top of it, and all three of us with cups of beer in our hands. It didn't look too good. I had to do something, so I said, "Some beer, Mr. Burch?"

"Where did you get this beer, Mac?"

"Out of that keg there, Mr. Burch."

"Umm. Stealing, eh? Breaking into property. Strictly forbidden, you know."

"Yes, sir, I know, Mr. Burch." I hung my head in shame.

"Well, come up to my office after we get into Portland. I wanted to see you anyway."

Next day after our arrival I called upon my boss in his office.

"Well, McCarty," he said, "who taught you that trick with the beer keg?"

I wasn't going to give away my pal Booth, so I just said, "A brakey."

"Well, put a stop to it at once. I can't have it. Mary, put fifty demerits against Mr. McCarty's record, and a five-day leave without pay. Also write him out a four-day pass so he can leave town for a spell."

On my arrival home next morning, Dad said, "Well, what are you off for now? Trouble again?"

"Oh no, Mr. Burch decided that I had been working too hard. That's a hard run I got, you know."

"I see, drawing pay then, I suppose."

"Well, no, not exactly. This isn't a paid vacation, just a short leave."

"Uh huh. Well, come on over to the brewery. We'll get us a glass of Bock. And there's something over there I want you to see, too. Might interest you."

At this time Dad was bookkeeper for the brewery.

So we went there and Dad took me back to the storage yard for empty kegs. One of them had been taken apart and Dad picked up a couple of the staves and pointed to little pieces of wood sticking through them. "Son, what do you reckon caused all this?"

So I told Dad about the way we opened beer kegs on hot days. It soon got all over the brewery. But the owner was a pretty good guy and never said much about it.

Well, there's a lot more in that little old brownie record book of mine, but this will do for now. It goes to show that a fellow could easily pick up brownies in those good old days, but they never really meant very much. Once I had a right smart assortment of them collected and had been warned that a few more might mean I would find myself without a job as messenger, when one night on the mail I got a chance to wipe them all off at one swipe.

When our train began to slow down out in the middle of nowhere one dark night, I turned down the gas lamp and opened the side door to take a look outside. What I saw didn't look good—two horses standing by a rail fence, both of them saddled.

This time I had my gun on. There had been a lot of tough-looking customers hanging around that part of the country, and we always carried a lot of coin and gold bullion on every trip.

As we came to a stop, a fellow ran along the side of the mail car coming toward my car. He had not seen me there in my darkened car door.

When he did see me he started running, and yelled back to someone who stood by the engine. "Come on, Bill, they're wise. Make for the horses."

Well, just for luck I let go two shots to kind of hurry them up a little. It did. They leaped on their horses and were gone without firing a shot.

We went on, and the conductor reported the incident at the next station.

Next morning at daylight the sheriff and a posse found a lot of blood spots where the horses had been standing, and it was presumed that I had hit something. The posse soon lost the trail and that was the end of it.

Up in the general office where I was soon called, they asked me if it were possible that I had hit an innocent man. "Well," I said, "it's not likely. I don't think a couple of innocent men would stop a train that time of night, anyway, I needed a little practice with that old gun. Guess I didn't do much harm."

A few days later I got a letter from the general superintendent saying that inasmuch as I had no doubt saved the car from being held up and robbed, all brownies had been removed from my record and I was free to begin all over again.

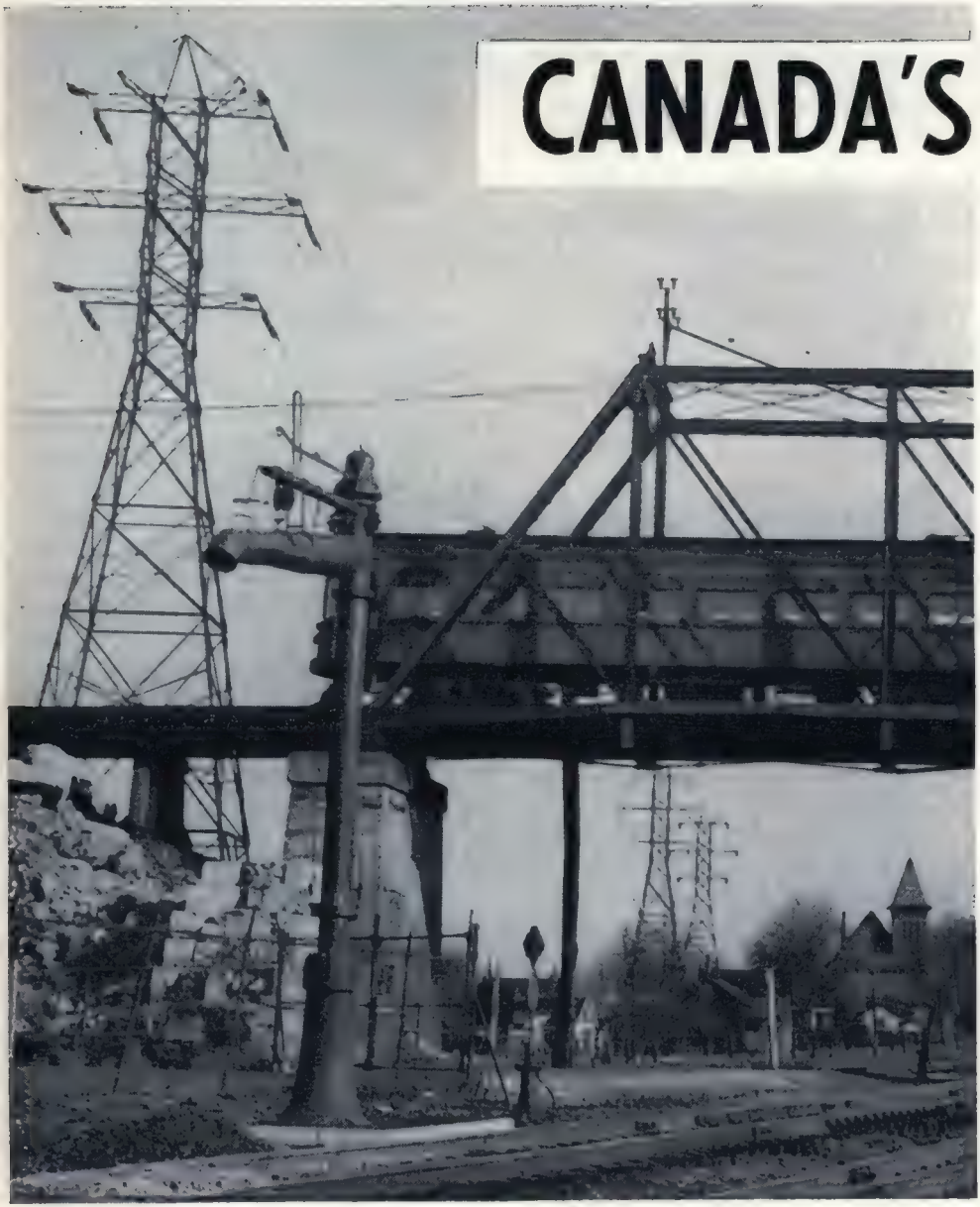
I began again, and I soon had another collection of brownies, but that's another story.

Pride of the Northwest—SP&S

By RICHARD L. NEUBERGER

November Issue ***On Sale October 3***

CANADA'S



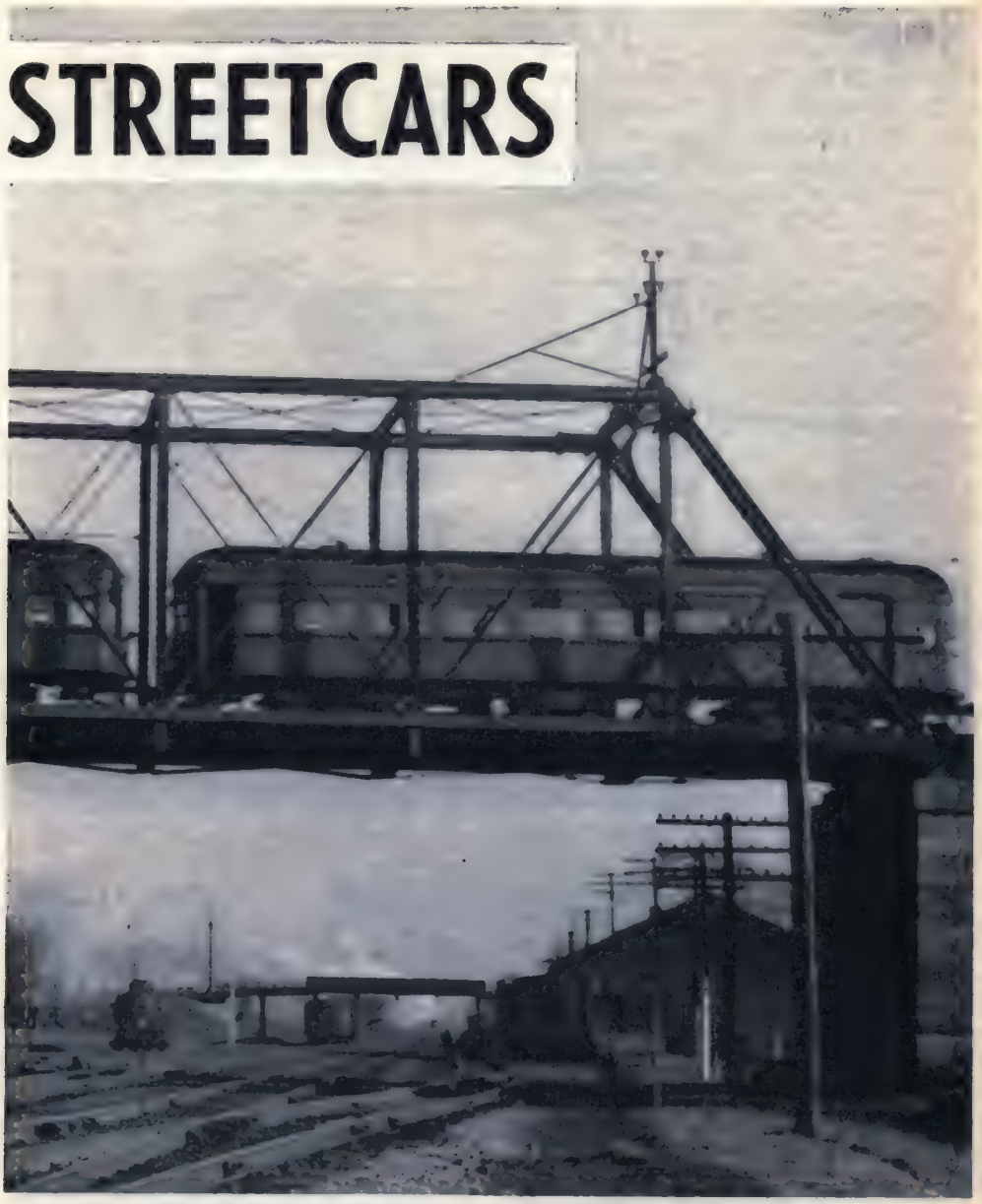
Cyril Gilmour, St. Catharines, Ontario

JOHN M. MILLS and
STEVE MAGUIRE

This All-Time Index Of Dominion Trolleys Should Satisfy Every Electric Lines Addict

OVER the past ten years we have brought our readers occasional listings of streetcar and interurban lines in the United States and Canada. To give a complete, all-time U. S. index is a nearly-impossible task, but Canada has had fewer juice lines, so we are able to present a listing of all the Dominion

STREETCARS



trolley and interurban companies, past and present.

The first trolley line in Canada was an experimental route erected at Toronto in 1885 by Van Depoele. It operated with a trolley pole making contact with the overhead wire, remarkably similar to present use as compared with some other installations of early days. Being an experimental line, it lasted only a short time. The first trolley routes, built for public transportation in Canada were constructed in 1888 at St. Catharines and at Windsor, Ontario. These were the start of the 2000 miles or so of electric railways later built in Canada.

Most of the lines were located in the busy Province of Ontario, which claimed more than half of the total trolley trackage in the entire Maple Leaf dominion. Even today, Ontario, with its extensive Toronto Transportation Commission (280 miles of track), and many other smaller lines, has by far the greatest concentration of electric lines in Canada.

Most of the trolleys in Canada remained in operation until the end of World War II. There were some short routes which gave up in the early years, but, compared with the early abandonments in the United States, the Canadian lines lasted well into the 1940s. There were 20 interurban lines in Canada. The largest was the 89-mile Chilliwack interurban line out of Vancouver, operated by the British Columbia Electric Railway until dieselization in 1950. Six interurbans remain in operation today. There are the Grand River Railway, the Lake Erie & Northern Railway, the London & Port Stanley Railway, the Welland line of the Niagara, St. Catharines & Toronto Railway, the Montreal & Southern Counties Railway and the St. Anne line of the Quebec Railway, Light & Power Company, now owned by Canadian National Railways.

Including the interurbans, there are 13 electric lines still running in Canada. Two of these operate freight service only. They are the Cornwall Street Railway, Light & Power Company and the Oshawa Railway. We're skipping over the Shawinigan Falls Terminal Railway, a freight-only line which dieselized in 1950. Still quite active as city electric lines are the Winnepeg Electric Company, the Ottawa Electric Railway, the Toronto Transportation Commission, the Montreal Tramways and the British Columbia Electric Railway.

For our purposes, we are not including heavy electrifications. No electrified steam roads are included in the following index. The trolley and interurban lines shown are listed under the name by which the line is or was best known. Mileage at the height of operation is shown, with the date of final abandonment of lines no longer operating.

Alberta

Calgary Municipal Ry., 80 mi. (1950)
Edmonton Street Ry., 55 mi. (1951)
Lethbridge Municipal Ry., 12 mi. (1947)

British Columbia

British Columbia Electric Ry., 335 mi.
Nelson Street Ry., 4 mi. (1949)

Manitoba

Brandon Municipal Ry., 10 mi. (1931)
Winnipeg Electric Co., 170 mi.
Winnipeg, Selkirk & Lake Winnipeg Ry. (Winnipeg-Stonewall), 42 mi. (1939)

New Brunswick

Moncton Tramway, Electric & Gas Co., 5 mi. (1930)
New Brunswick Power Co. (St. John), 25 mi. (1949)
St. Stephen Street Ry. (owned by Calais, Me., Street Ry.) , 3 mi. (1929)

Newfoundland

Newfoundland Light & Power Co., 3 mi. (1949)

Nova Scotia

Cape Breton Tramways (Sydney-Glace Bay, North Sidney-Sidney Mines), 22 mi. (1947)
Nova Scotia Light & Power Co. (Halifax), 27 mi. (1949)
Pictou County Ry. (Westville-Trenton), 10 mi. (1930)
Yarmouth Electric Ry., 3 mi. (1928)

Ontario

Belleville Street Ry. (never electrified), 3 mi. (1905)
Brantford & Hamilton Electric Ry., 23 mi. (1931)
Brantford Municipal Ry. (interurban to Paris abandoned 1929; predecessor Grand Valley Ry. abandoned Paris-Galt line when Lake Erie & Northern was constructed in 1916), 25 mi. (1940)
Chatham, Wallaceburg & Lake Erie Ry., 38 mi. (1930, passenger 1927)
Cornwall Street Railway Light & Power Co., 11 mi. (passenger 1949, freight still operates)
Fort William Electric Ry., 28 mi. (1948)
Grand River Ry. (Galt-Waterloo), 18 mi.
Guelph Radial Rys., 9 mi. (1939)

Hamilton & Dundas Street Ry., 7 mi. (1924)
Hamilton, Grimsby & Beamsville Electric Ry., 23 mi. (1931)
Hamilton Radial Electric Ry. (Hamilton-Oakville), 18 mi. (1929)
Hamilton Street Ry., 45 mi. (1951)
International Transit Co. (Sault Ste. Marie), 6 mi. (1941)
Kitchener-Waterloo Rys. (including Berlin and Bridgeport), 9 mi. (1946)
Kingston, Portsmouth & Cataraqui Electric Ry., 8 mi. (abandoned 1930 when car barn burned down, destroying most cars)
Lake Erie & Northern Ry. (Galt-Port Dover), 51 mi.
London & Lake Erie Railway & Transportation Co. (London-Port Stanley), 30 mi. (abandoned 1918 when forced out of business by London & Port Stanley Ry.)
London & Port Stanley Ry., 47 mi.
London Street Ry., 42 mi. (1940)
Mt. McKay & Kakabeka Falls Ry. (Fort William), 7 mi. (1917)
Niagara Falls Park & River Ry. (Queenston-Niagara Falls-Chippewa), 23 mi. (1932; was Canadian Division of International Railway Co.)
Niagara, St. Catharines & Toronto Ry. (Port Dalhousie-Niagara Falls, Thorold-Port Colborne, St. Catharines-Niagara-on-the-Lake), 100 mi.
Niagara, Welland & Lake Erie Ry. (Welland city line), 5 mi. (1930)
Nipissing Central Ry. (Cobalt-New Liskeard), 16 mi. (1935)
Oshawa Railway, 25 mi. (passenger abandoned 1939, freight still operates)
Ottawa Electric Ry., 57 mi.
Peterborough Radial Ry., 8 mi. (1927)
Port Arthur Electric Ry., 21 mi. (1948)
St. Thomas Municipal Ry., 8 mi. (1926)
Sandwich, Windsor & Amherstburg Electric Ry. (Windsor-Tecumseh and Amherstburg), 57 mi. (1939)
Sarnia Street Ry., 10 mi. (1931)
Schomburg & Aurora Ry. (owned by Toronto & York Radial Rys.), 14 mi. (1929)
Sudbury-Copper Cliff Suburban Ry., 9 mi. (1950)
Toronto Suburban Ry. (Toronto, Guelph and Woodbridge), 70 mi. (City part sold to Toronto Transportation Commission 1923, Woodbridge line cut back to Weston 1925, remainder abandoned 1926, Guelph line abandoned 1931)
Toronto Transportation Commission, 280 mi.
Toronto & York Radial Rys. (Toronto-Sutton, Port Credit and West Hill), 73 mi. (portions of all 3 routes replaced by TTC service 1922-24, all taken over by TTC 1927. Sutton line abandoned 1930 except 11 mi. of North Yonge line abandoned by TTC 1948. West Hill line cut back to Scarboro 1930 and abandoned 1936. Port Credit line cut back 1928, remainder abandoned 1935. T&YR-owned Schomburg & Aurora abandoned 1929)
Windsor, Essex & Lake Shore Rapid Ry. (Windsor-Leamington), 37 mi. (1932)
Woodstock Thames Valley & Ingersoll Ry., 12 mi. (1925)

Quebec

Hull Electric Co. (Hull-Ottawa and Aylmer), 31 mi. (1946)
Levis Tramways, 12 mi. (1947)
Montreal & Southern Counties Ry., 63 mi. (cut back Granby-Marieville 1951)
Montreal Tramways, 280 mi.
Quebec Railway Light & Power Co. (Quebec-St. Anne), 50 mi. (city lines abandoned 1948, interurban sold to CNR 1951)
Shawinigan Falls Terminal Ry. 17 mi. (freight only, dieselized 1950)
Sherbrooke Railway & Power Co., 11 mi. (1931)
Three Rivers Traction Co., 7 mi. (1933)

Saskatchewan

Moose Jaw Electric Ry., 14 mi. (1932)
Regina Municipal Ry., 33 mi. (1950)
Saskatoon Municipal Ry., 25 mi. (1951)

FOR SOME VIEWS of Canada's streetcars, past and present, thumb through the next eight pages while we take you on a ride from St. Thomas to Simcoe, and points between

William D. Middleton, Madison, Wis.

"LONDON & PORT STANLEY RY., 47 mi." Southbound passenger train (Cars 2, 6, 4) crosses the Michigan Central's main line at St. Thomas, Ontario, on a sunny June day

Stan F. Styles, Vancouver, British Columbia

"WINNIPEG ELECTRIC CO., 170 mi." No. 374 holds a handful of Morse Place passengers

Steve Maguire

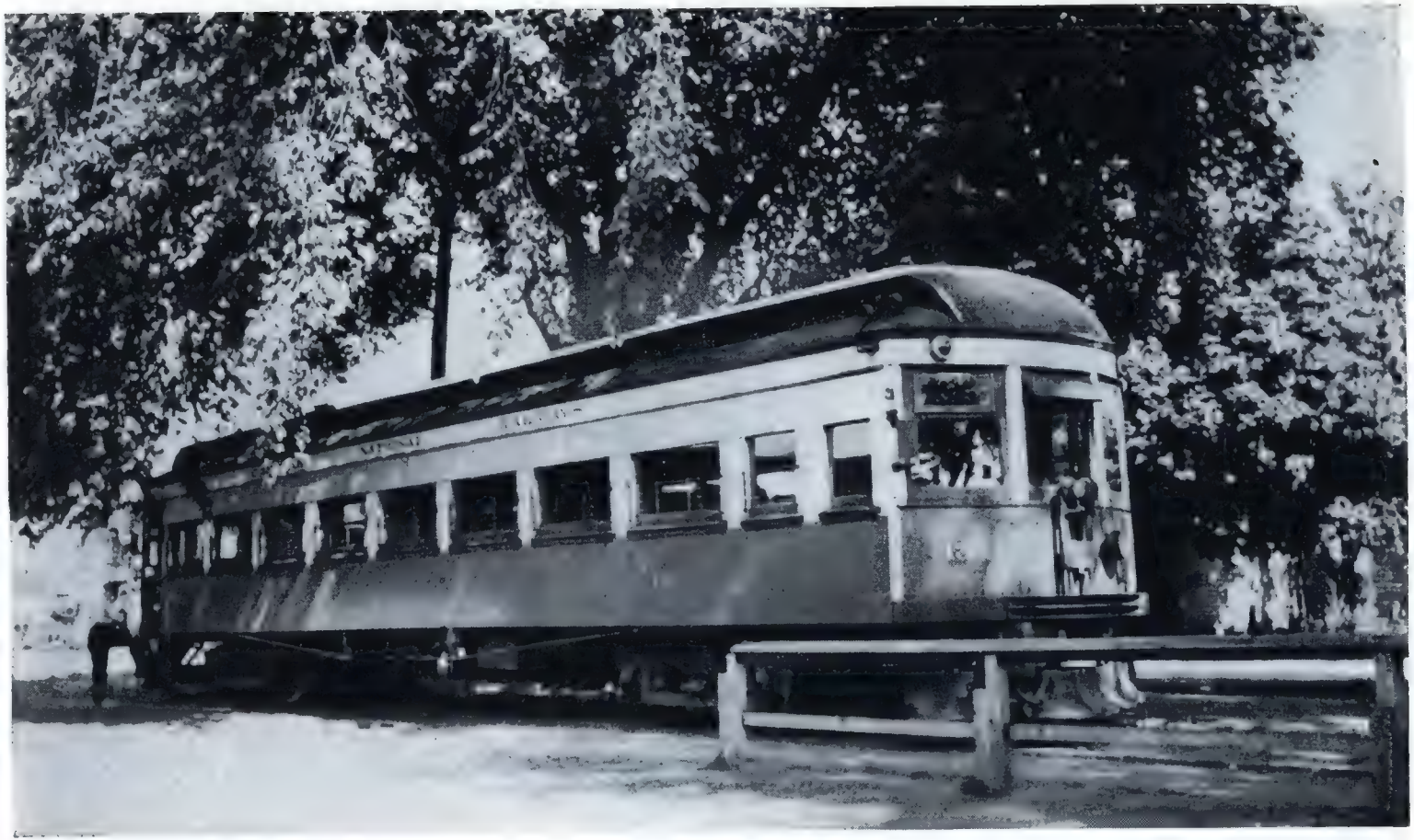
"LONDON STREET RY., 42 mi. (1940)." The Richmond car, 148, has vanished like the cigar store Indian

Harold McMichael, Waterford, Ontario

"GRAND RIVER RY., 18 mi." Checkerboard-end No. 846 at Preston, Ontario, is similar to the Lake Erie & Northern's distinctive paint jobs

Photographer unlisted

"CALGARY MUNICIPAL RY., 80 mi. (1950)." The West Hillhurst transfer car in 1941



Maguire

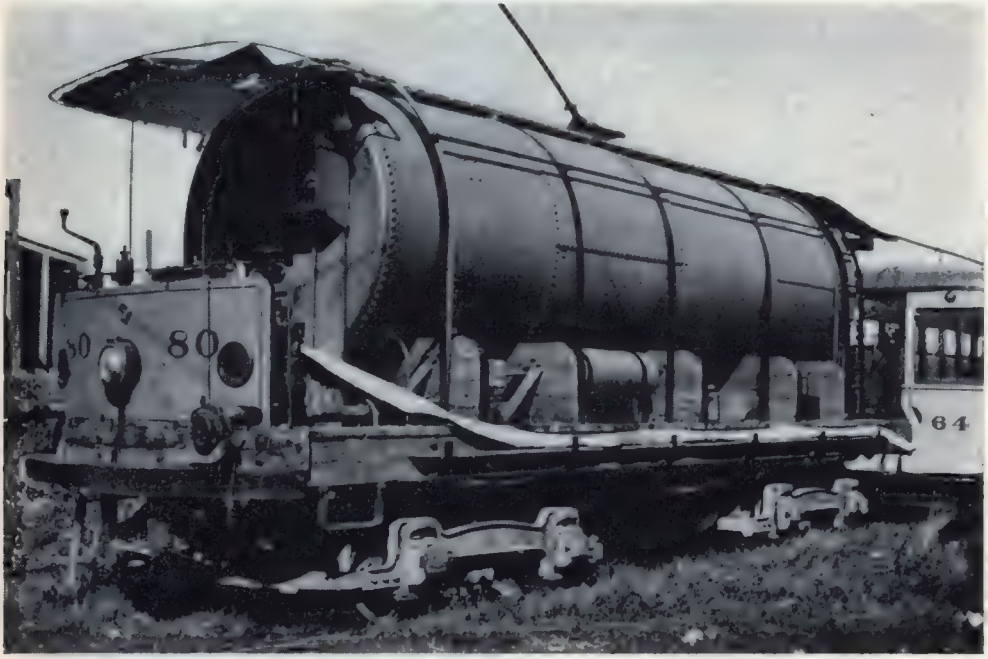
"NIAGARA, ST. CATHARINES & TORONTO RY., 100 mi." The Canadian National-owned line is still a going concern, although this car and station aren't. The vehicle was scrapped, and the shade tree stop in St. Catharines has been vacated, too

Photographer unlisted

"BRITISH COLUMBIA ELECTRIC RY., 335 mi." Autos date this view of downtown Vancouver's 4th Avenue line to 1938, and buses eventually will make BCER trolleys outdated

Maguire

"SUDBURY-COPPER CLIFF SUBURBAN RY., 9 mi. (1950)." Cars 37 and 30 topped the rise near the Hotel Frontenac in Sudbury '44 rush hour



John D. Knowles, Toronto

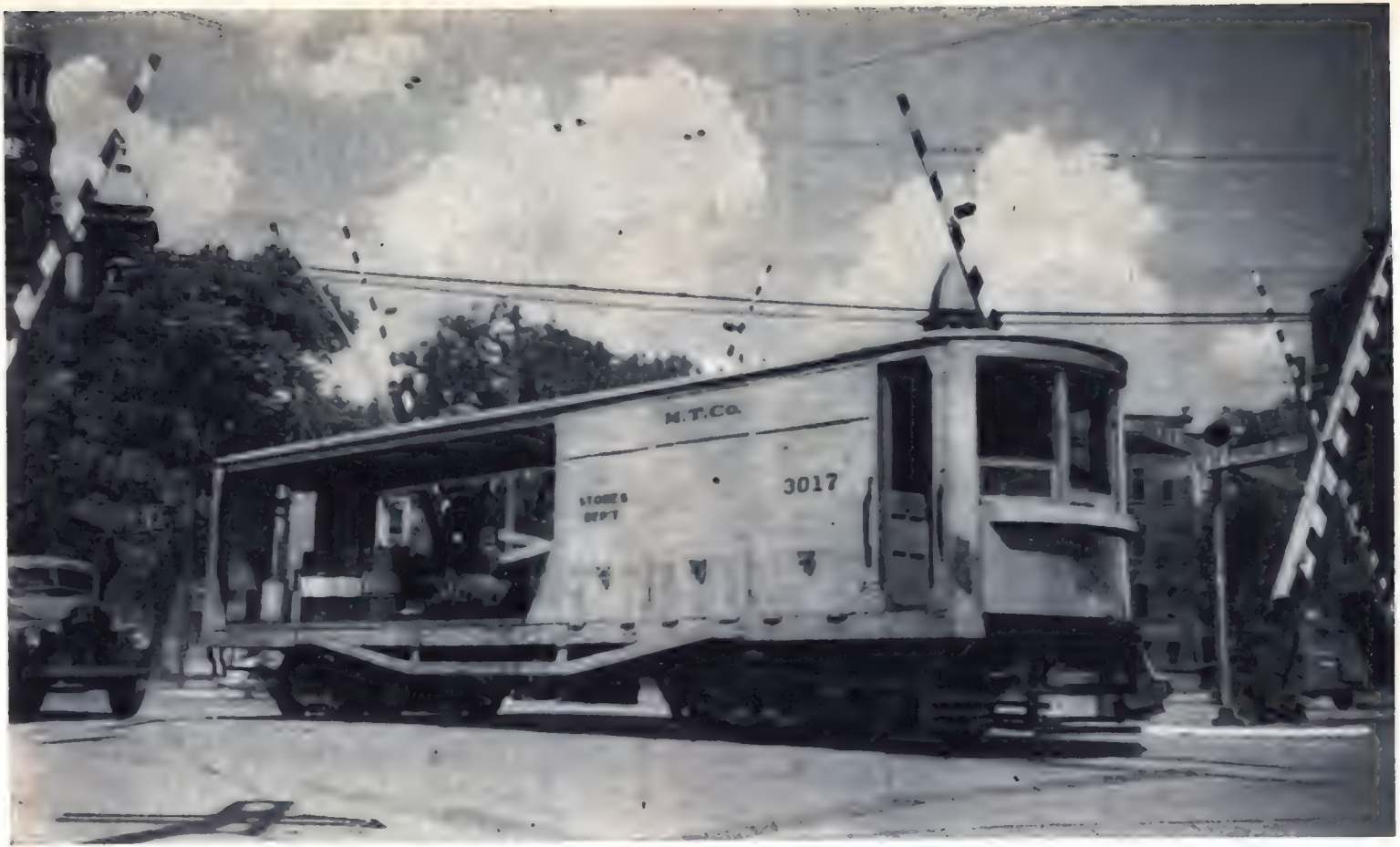
"KITCHENER-WATERLOO RYS., 9 mi. (1946)." On hot summer nights Sprayer 80 cooled Kitchener's streets

J. R. Bernard, Toronto

"TORONTO TRANSPORTATION COMMISSION, 280 mi." Subway construction two winters ago made this detour necessary—temporary track at Yonge and Heath Streets

Maguire

"TORONTO & MIMICO ELECTRIC RY." The Lake Shore Route had one of Canada's few doubledeckers



William R. Smith, Philadelphia

"MONTREAL TRAMWAYS, 280 mi." For the camera expert, Photographer Smith explains he used a filter to catch 3017 making a grade crossing in west Montreal. "This old boy was a familiar sight all over town during my four weeks there in August '49"

Middleton
"LAKE ERIE & NORTHERN RY., 51 mi." Train 12 (Car 975) approaches Simcoe, Ontario, enroute to Port Dover from Galt three Junes back

Glenn S. Moe, South Bend, Ind.

"YOU HAVE NO PARKING PROBLEM WHEN YOU TRAVEL WEST PENN." Slogan on Car 729 sold the WP Rys. to residents of Uniontown, Connellsville, Scottsdale, Mt. Pleasant and Greensburg. Scene: west Connellsville near the Western Maryland overpass in June, '39

Carbarn Comment

Conducted by STEVE MAGUIRE

NEW RAPID TRANSIT CARS for the Cleveland high-speed line now under construction have been ordered from the St. Louis Car Co., Charles E. Welsh of 569 East 232nd Street, Euclid 23, Ohio, reports. He tells us the order is the result of bids sent out by the City of Cleveland. There were two bidders, Pullman-Standard and St. Louis. St. Louis' bid for the 72 cars was considerably lower than that of Pullman-Standard.

The new cars will be delivered within the next 18 months and they will operate out of Union Terminal along the Shaker Heights Rapid Transit route, then branch off along the new rapid transit trackage now under construction in East Cleveland.

Welsh reminds us that Cleveland now has five trolley lines on its municipally-owned transit system, East 55th and Superior on the east side, and Madison, Clark, and West 25th on the west and south side. Among the cars now in service are the 4000 series Kuhlmans and the 75 PCC cars bought in 1946.

* * *

ANOTHER lightly-traveled passenger interurban line is about to end its two passenger trips daily. The Charles City Western Railway in Iowa, which we featured in the October, 1949 issue, has applied to abandon all passenger service from Charles City to Colwell and Marble Rock, reports Russell L. Olson of Minneapolis.

Russell recently took a ride on the CCW and noted that on the morning trip to Marble Rock, there were only six passengers in the car, and they were on for the ride only. On the afternoon trip to Colwell, the car was empty as it left the barn.

CCW Car 53, the last one of its type, a wooden, center-door interurban that once ran on the Shore Line Electric in Connecticut, is now out of service, Olson writes, and rests in the yard with pilots and gear-box covers removed.

Olson also visited the Mason City & Clear Lake interurban freight line not too far from the CCW and reports that it is doing a rushing business on its 20-mile route. Although the road had been hostile to fans, Olson had no trouble in taking photos of the equipment.

* * *

BIRMINGHAM TRANSIT COMPANY has asked the Alabama Public Service Commission for permission to abandon both long suburban routes to Bessemer, we learn from J. H. Goodson of Atlanta, Ga. (Goodson's father worked 35 years on the Birmingham trolleys.) The South Bessemer line will be replaced with buses, but the North Bessemer line which is largely on private right-of-way, will probably be abandoned.

These changes will leave three Bessemer trolley routes, East Lake, West End and Ensley. They will be served by PCC cars exclusively, if the Bessemer rail lines go out.

* * *

TWO MORE of the ten Pacific Electric rail passenger lines will end if the company obtains permission to use buses on the Van Nuys and Hollywood lines out of Los Angeles. Reason: Construction of the Hollywood Freeway will require removal or reconstruction of the rails on Santa Monica Boulevard.

The Pacific Electric claims both lines lost money, hundreds of thousands in 1951, and the reconstruction of the track would cost $250,000. PE states bus-

WHAT'S WATTS? These three Watts-built cars run on the Pacific Electric Railway's Glendale-Burbank line from Los Angeles daily except Sunday. PE's Burbank yard is the setting

Gordon B. Osmond, Sun Valley, Calif.

Maguire

ON THE WAY—OUT. Birmingham Transit intends to bus its 10-mile suburban run to South Bessemer, a move signaling the end of Car 562 and others of her ilk

es will cut 10 or 15 minutes off the running time of the trolleys.

* * *

EVER HEAR of the Bennington & Woodford Electric Railway up in Vermont? No? Well you're far from alone. This forgotten trolley line ran out of Bennington into unpopulated country for 9 miles, between 1895 and 1898. It finally succumbed to the ravages of a flood in '98. The B&W had been the successor to an ill-fated steam road, the Bennington & Glastenbury Railroad.

Full histories of these roads are included in the 1952 issue of *Transportation,* the publication of the Connecticut Valley Chapters of NRHS and ERA, which also contains a complete history of the Rockland, Thomaston & Camden Street Railway of Maine. In addition, the 42-page publication includes the annual report of Seashore Electric railfan operations in Kennebunkport, Maine, along with several pages devoted to the history of the Lehigh Valley Transit's Car 1030 which the group recently acquired. This LVT car was originally Indiana Railroad No. 65. (Copies of the issue can be obtained for $1.10 each from Roger Borrup, Warehouse Point, Conn.)

* * *

PHOTO of a trolley at the end of the Lorraine Cemetery line in Baltimore, which appeared in our July issue, interested H. H. Diers of Washington, D. C. who writes that it is one of his favorite lines. A year ago the Baltimore Transit Company tried to do away with the trolley on this line, but the residents put up such a howl that it was retained. New crossties have been installed, so maybe it will run for a while longer.

Diers adds that the scene is in the small town of Dickeyville, a quaint English-looking village. He walked through it one snowy Christmas day and it looked like a living Christmas card, with sleighs, children skating, and the old church as a backdrop.

THREE-MILE STRETCH of trolley freight track mentioned by Walter Martin in our May issue was not part of the Lake Shore Electric line, but instead was part of the Toledo, Fostoria & Findlay, reports Don Kinnaman of Port Clinton, Ohio. The line came in from Fostoria and paralleled the old Lake Erie & Western steam route for most of the way. It entered Fremont near the city limits on the west side, turned south toward the Sandusky River, then followed Highway 53 into downtown Fremont, where there was an interchange with the Lake Shore Electric.

When the TF&F was abandoned, the 3-mile section was torn out. The right-of-way was thereafter purchased by the Ohio Power Company which regraded the roadbed with crushed limestone and relaid the track to the Sandusky River power station. For many years this station had laid idle, but it was rebuilt about the time the TF&F quit. Coal was shipped by the Ohio Power Company to the plant over the Nickel Plate and shunted by the trolleys to the plant on the river. Two trolleys were used, a box motor (ex-Fostoria & Fremont) and a wooden cab motor (ex-Lake Shore Electric). Only the cab motor is in service now, Kinnaman informs us.

Kinnaman reminds railfans interested in remnants of old Lake Shore Electric equipment that there are several such pieces one mile east of Huron on Highway 2, on the north side of the road. They include box and freight cars, freight motors and passenger motors (all on their trucks) and are parked on short stretches of LSE track. They are painted in varied colors and are used from time to time as lake cottages. Another old piece of equipment, this one from the Ohio Public Service Company, rests on its trucks on a short stretch of track in back of the Lakeview substation in Port Clinton. This old car has had its interior stripped, but the rest of it is in good shape. The car was used when the Ohio Public Service line was torn up from Clay Center east to Marblehead.

NOT ON THE TIMETABLE

HARRY HILLER

THOSE OLD TALES we read more years ago than we care to remember—like Aladdin and his wonderful lamp and what he did with it—they fade into the background in this age of electronics: CTC; radio from caboose to head end; radio from dispatcher to way stations and elaborate loudspeaker systems whereby the yardmaster controls far-flung switching movements. If these things had been in operation back in 1904 there would be no story of a certain unscheduled trip on the high iron between Ontario and Walnut, California. Lady Luck must have been riding the rail that night. How close ex-Senator Clark came to wiping out his Wall Street backers as a result of that foolhardy escapade of a telegrapher and an engine watchman can now be told, as almost all concerned have reached the rocking chair stage and are no longer in fear of those sessions held on the carpet by the big brass.

The Los Angeles & Salt Lake Railroad had been trying for nearly a year and a half to find enough solid bedrock in the Santa Ana River to complete Mr. Clark's line from Salt Lake City to Los Angeles and San Pedro. The engineers had been driving piling of different lengths through the quicksand, but when they came back to the scene the next morning they couldn't find a piling even with a search warrant.

In 1904 there were no tell-tale red lights flash-

It was our second close call—but Lady Luck was still with us

ing on CTC panels to inform train dispatchers of movements on the main line or sidings, no warnings of open switches, broken rails or falling rocks. That was the reason that this operator, yours truly, and the engine watchman, Jack Smith, could take an engine out onto the high steel and make a 13-mile run west to Walnut to visit a couple of good-looking girls.

At the time mentioned, because of the quicksand traffic was run only in the daytime between Ontario and Los Angeles. The passenger train out of Los Angeles each afternoon tied up at Ontario and resumed schedule in the morning. This engine and one from the work train was under the faithful (?) care of Jack Smith, engine watchman, and it was my job to take care of the light telegraphic work and the levers in the tower.

The train dispatcher in Los Angeles was a good sport and would give me an hour or two off nights, but he didn't know what use Jack and I made of our loafing time. I would tell him that Jack wanted permission to come out on the main to get oil or water, or to make a cannery switch, and he would give us the whole road, as he called it.

To save oil, switchlights were not kept burning at night, there being no trains anyway. This was a good thing for Jack and me—nobody could see us throwing switches, and as the Southern Pacific ran alongside our new line west of Ontario our lights would not cause any confusion.

One never-to-be-forgotten Wednesday night the construction engineers came in with the glad tidings that at long last bedrock had been found and the last pier was in place. The LA&SL was now complete.

Jack and I knew this would be our last night of adventure. After a telephone conversation with our girl friends I asked the dispatcher for an OK to go out on the main line to get oil and water. "Ani tng on te pike tonite?" I asked.

The dispatcher tapped his key aimlessly for a second or so, as if thinking, then said: "Not a tng. There will be plenty tmw, tho."

"Out for an hour or so?" I asked.

"Sure. U bet U can go home if U wanna."

"Gee! Tnx. Thas fine."

That let me off for the night, which meant until 7 a.m., as we worked 12-hour shifts in 1904.

I lined up the spur where Jack had the passenger and work engines. He came out with the passenger crock headed west.

About the time we finished taking oil and water, the cannery boss asked if we could switch him in a couple of reefers. We grabbed three and being too lazy to cut off the extra car, we spotted two and started for Walnut with the third one. We couldn't lose ten precious minutes setting it out. The girls were waiting.

We made Walnut dragging that reefer in nothing flat and went through the little town with a clatter. The ranch where the girls lived was a mile west of town and close to the old Lemon Station on the Southern Pacific.

We pulled up opposite the ranch house and gave a few little toots on the whistle.

One would have thought that we were the sole owners of the LA&SL, the way those girls looked at us as they climbed into the cab. Sadie, Jack's heart throb, went to his side of the engine, while Sue came to help me feed oil to the crock. Both girls took turns running it back and forth until they happened to think of the food they had fixed for us at home.

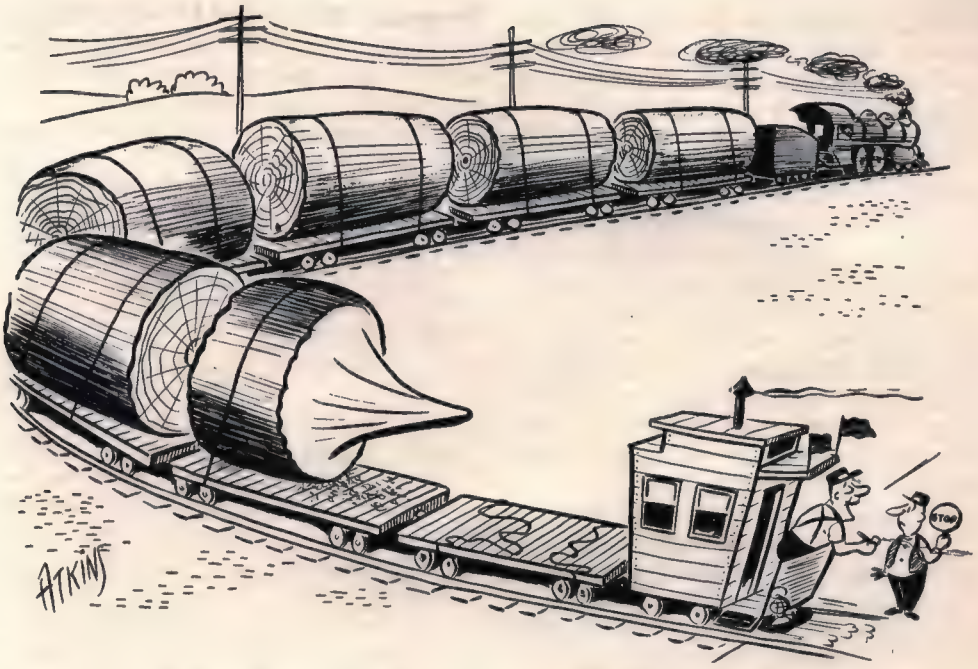
We spotted the engine and reefer on the high iron, doused head and cab lights and proceeded to the feast.

We stuffed ourselves with chicken sandwiches and drank punch until we felt ashamed of ourselves, then figured it about time to get back to Ontario to take care of the work train engine before she had melted a crown sheet.

The girls came back to the engine with us and piled into the cab. They were trying to talk us into staying a little while longer.

"Jack," coaxed Sadie," Let us run the engine some more. Remember this is our last night."

Jack grinned: "Guess that will be OK.



"It would be a long trip if I didn't have my whittlin' to pass the time"

Guess the gol-darned old hog won't blow up before we get back."

Sadie climbed on the hogger's seat and started west while Sue was getting firing instructions from me. I happened to look over her shoulder and I thought I could see the flickering reflection of a Pyle headlight moving over the clouded skyline: "See that light coming over there?" I asked her.

"Heck, that's on the SP," she said.

"Do you see it?" I asked Jack.

"That's on the SP," he agreed with the girls.

"Reverse this crock," squealed Sadie, "and we'll run them a race to Walnut."

"That would be some race," agreed Jack, "especially with us backing up and pushing an empty reefer." He reversed the engine. It was then I saw that the Pyle was reflecting on our rails. "We're going to have a race," I yelled, "That train is on the Pedro and it's coming fast."

Jack pulled Sadie from the hogger's seat and jerked open the throttle. The firebox threw out a flash of flame that lighted up both sides of the right-of-way as the little passenger engine started leaving that part of the country, a solid circle of fire spewing from spinning drivers. We were now in a real race with two screaming girls getting in our way.

"Get out on that reefer, Harry," Jack yelled. "That will save us fifty or sixty feet to make the switch and we're going to need every foot, by the way that bird is coming."

I climbed out on the tender, which was now swinging and bouncing like a drop of cold water on a hot griddle. I leaned out as far as I could, hanging on with my toes, so to speak, and at last managed to clutch a grabiron on the side of the reefer. I made the top and tried to stand up to make the run to the far end. I was thrown flat and started rolling to the edge of the bouncing roof. I thought, "Here goes a crazy op," but I managed to gain the running-board and crawled the rest of the way on my hands and knees.

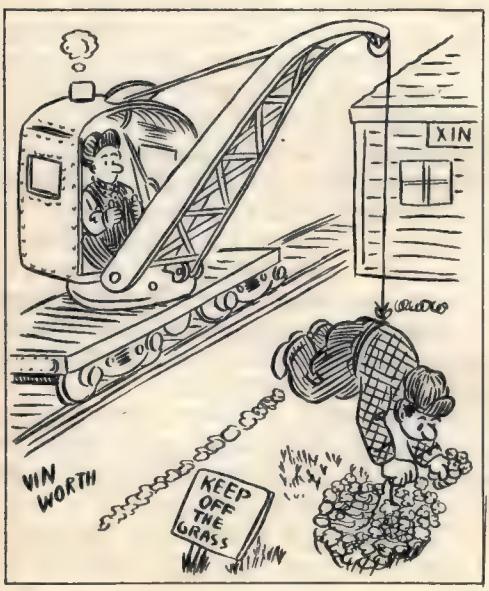
Now I was in a bad way. Digging in with my fingers until the nails started

breaking, I managed to drop my legs over the side of the reefer till I felt solid iron ladder under my feet. I was hanging on for my life when Jack big-holed the engine and slid to a stop two or three feet from the switch points of the Walnut spur.

If there had been a switch lock on that dwarf switchstand this would be a different story, but all that locked the switch was a heavy staple. I threw the points and Jack slammed the works into a string of baby loads at the backing house, doused the fire and all lights. With a roar and in a cloud of dust the *Special* tore by while angry car loaders crawled out from under packing cases and told us off.

We tossed a piece of waste into the firebox and started back to unload the hail-fainting girls in from their house, then took out after the *Special*. When we were about a mile from Ontario, Jack thought he saw the reflection of a headlight coming west. "You'll have to do some flagging, Harry. That must be the *Special* coming back. We can't gamble anymore on our luck."

So that was it. I took a handful of red fusees and the two lanterns and started running for Ontario. When I reached the required safety distance Jack followed.



He was so nervous that he kept whistling me clear out to the east siding switch, where I put out two guns before Jack returned the engine to the spur where it belonged, just as the *Special* came into sight, headed west again.

We shook hands. "Lady Luck was with us," I said. "I just remembered who is on that train. You know who it is?"

"No."

"Ex-Senator Clark and a bunch of his Wall Street friends. I read in the paper that he was throwing a party at Catalina and he probably wanted to show his backers that the Pedro was finished."

Jack made a quick run to get back to his engines as the *Special* pulled up to the tower and stopped and the conductor climbed slowly up the stairs. He looked as if he had had a very bad night.

"Glad to find you on the job, kid. Hadda helluva time getting through here on the eastward trip. Where were you?"

"The dispatcher let me go eat," I said.

"I hadda come up here and throw the levers to get through the yards. Good thing the brass were all asleep."

Lady Luck is still here, I said to myself. To the conductor I said, "Did you make a fast run from LA?"

"You bet. We wanted to get it over with. We had been hauling them around all day. Just one thing bothered the hogger to keep him from making a record run. He slowed down to nearly a stop a mile west of Walnut. Swore he saw what he claimed was a firebox flash on the line ahead of him. He must have been dreaming, cause he made up for lost time after he left Walnut."

I was still curious: "Did you get running orders for this trip tonight?"

"Sure. But guess we didn't need them. The dispatcher said we could have the pike as there was nothing on the road between here and Los Angeles."

That was all he knew about it. One hostler, two girls and a badly scared operator knew a lot better.

Lady Luck continued to stay with us. Jack Smith got promoted to engineer a month later and I got a day job.

End of the Run, Weehawken (New York Central) * *Published by Railroad Magazine*

Railfans!

RAILROAD'S cover reprint *End of the Run*, Weehawken, was painted on the spot by Charles Evers, internationally famous artist. Featuring New York Central *Mohawk* 3138, it is printed in full color on high-grade 11x14 inch glossy paper. Ideal for framing, this reproduction will be a fine addition to your locomotive portrait gallery. Get copies for railfriends, too. Send 25c for each print wanted, using the convenient coupon at right. ☛

RAILROAD, Dept. R
205 E. 42nd St., New York 17, New York

Gentlemen:

Please send me..... .....prints of **End of the run,** Weehawken, by Charles Evers, for which I enclose.....

Name .....

Address .....

.....

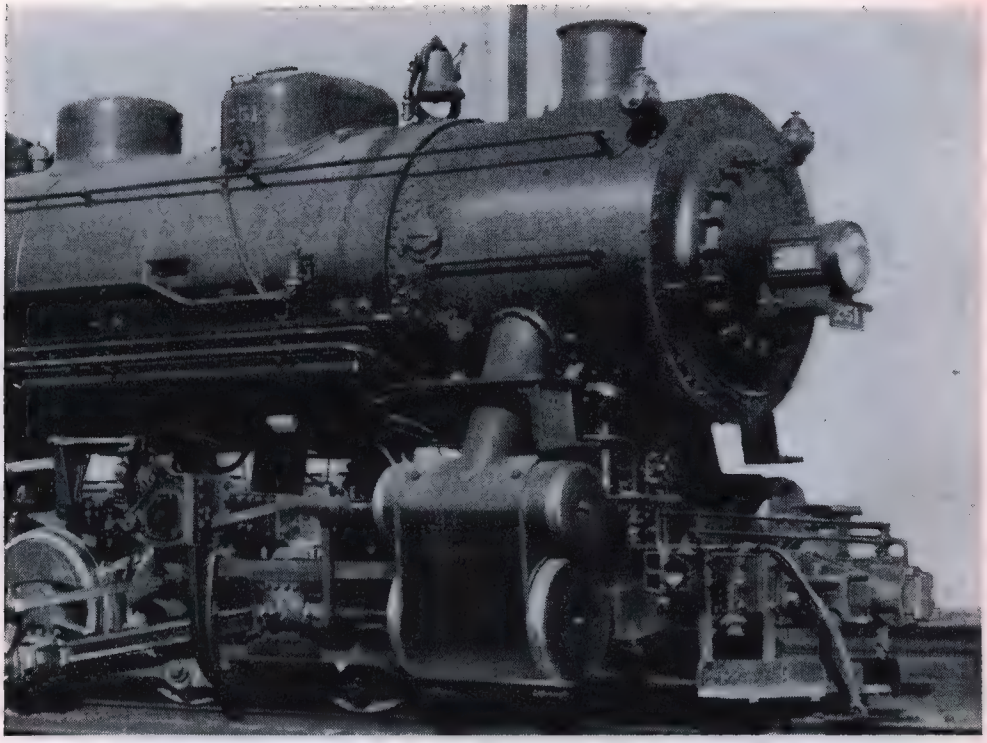
NO STAMPS, please

Locomotives of the

DETROIT, TOLEDO & IRONTON

Steam

Numbers	Cylinders	Drivers	Pressure	Engine Weight	Tractive Effort	Builder & Date
0-8-0 (Switcher) Type						
250–255	25 x 28"	51"	175	217,000	51,041	Lima, 1924
2-8-0 (Consolidation) Type						
104, 107; 117	22 x 30	57	200	227,560	43,305	Alco, 1909; '10
200*, 201	25 x 30	57	200	251,400	55,921	Brooks, 1916
*Now used only as stationary boiler at Flat Rock terminal when needed.						
*412, 413, 417 414; 416	26 x 28	62	205	247,500	53,197	Alco, 1913; '10; '16
*Ex,-Pennsylvania Class H-10's, purchased in 1929, Nos. 8684, 8664, 8666, 9918, 9840.						
2-8-2 (Mikado) Type						
315, 317	27 x 30	62	205	324,700	61,465	*PRR-Baldwin, 1916
*Ex-Pennsylvania Class L1S's, purchased in 1948, Nos. 1642, 3642.						
800–803, 804–807, 808–811	23 x 30	63	260	369,500	55,600	Lima, 1940; '41; '44



Roy L. Baker, Detroit

BETTER THAN GOLD LEAF. All DT&I steamers have raised numerals or lettering on the cab, dome, tender and under headlight instead of painted figures. Spic-and-span 8-wheel switcher shows Ford's influence still lingers from the Roarin' Twenties on the Pennsy-Wabash subsidiary

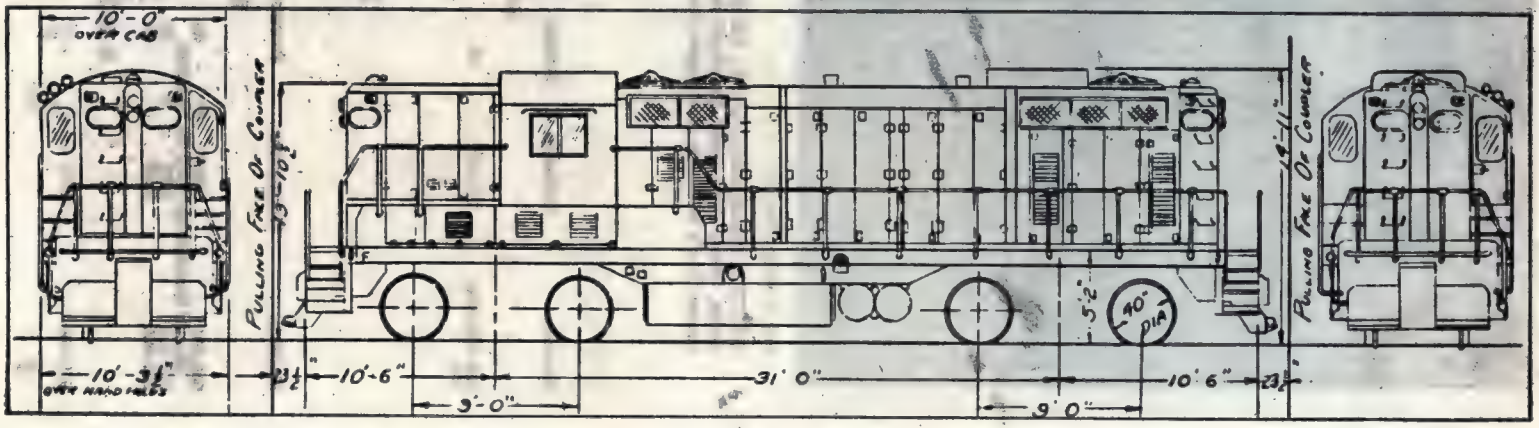
Numbers	Cylinders	Drivers	Pressure	Engine Weight	Tractive Effort	Builder & Date
2-8-4 (Berkshire) Type						
700–703; 704, 705	25 x 30	63	260	411,500	65,780	Lima, 1935; '39

Diesel-Electric

Numbers	Horsepower	Drivers	Engine Weight	Tractive Effort	Builder & Date
B-B (Switcher) Type					
900, 901	800*	40	227,940	56,250	EMD, 1941
*Rebuilt from 600 hp. April '52 by EMD.					
910–916	1000	40	248,000	60,750	EMD, 1948
920–924	1200	40	248,000	60,818	EMD, 1950
B-B (Passenger-Freight) Type					
950–954	1500	40	255,000	61,810	EMD, 1951

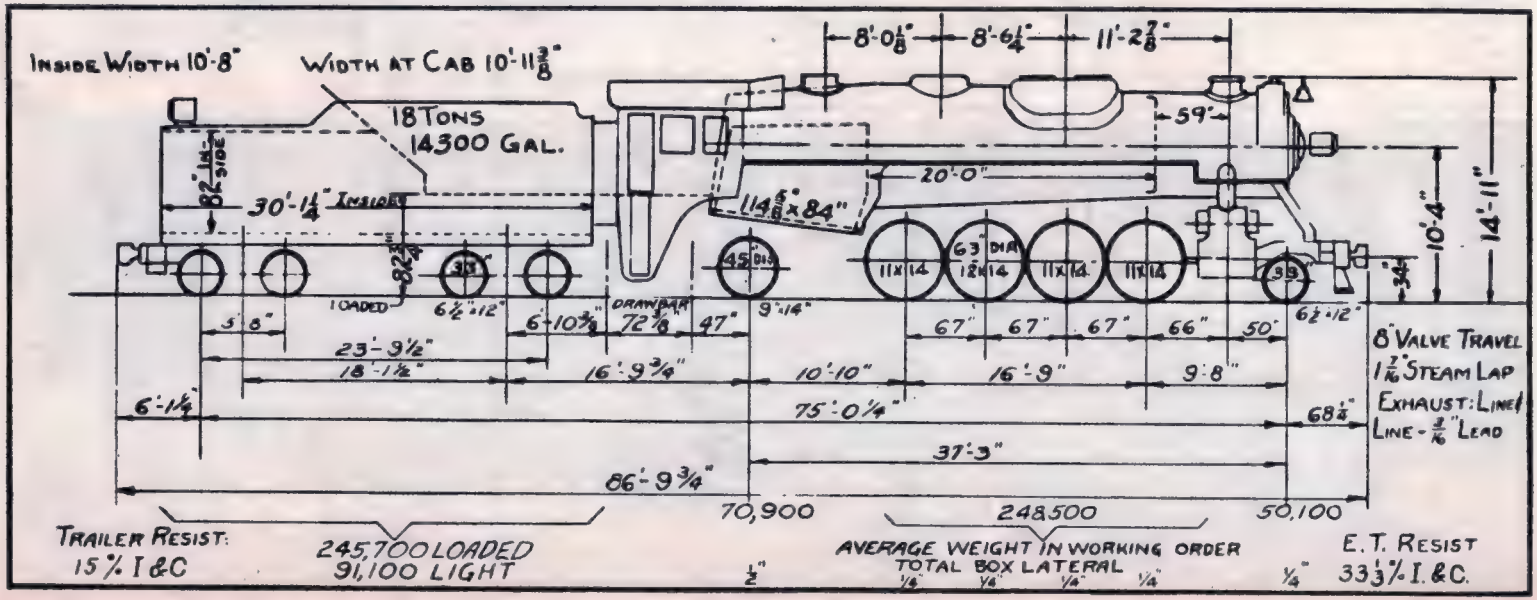
Detroit, Toledo & Ironton: R. W. Wilber, Supt. Motive Power and Eqpt.

YEAR-OLD EMD. DT&I's 950 series hauls iron, steel, autos, trucks and parts plus small number of passengers



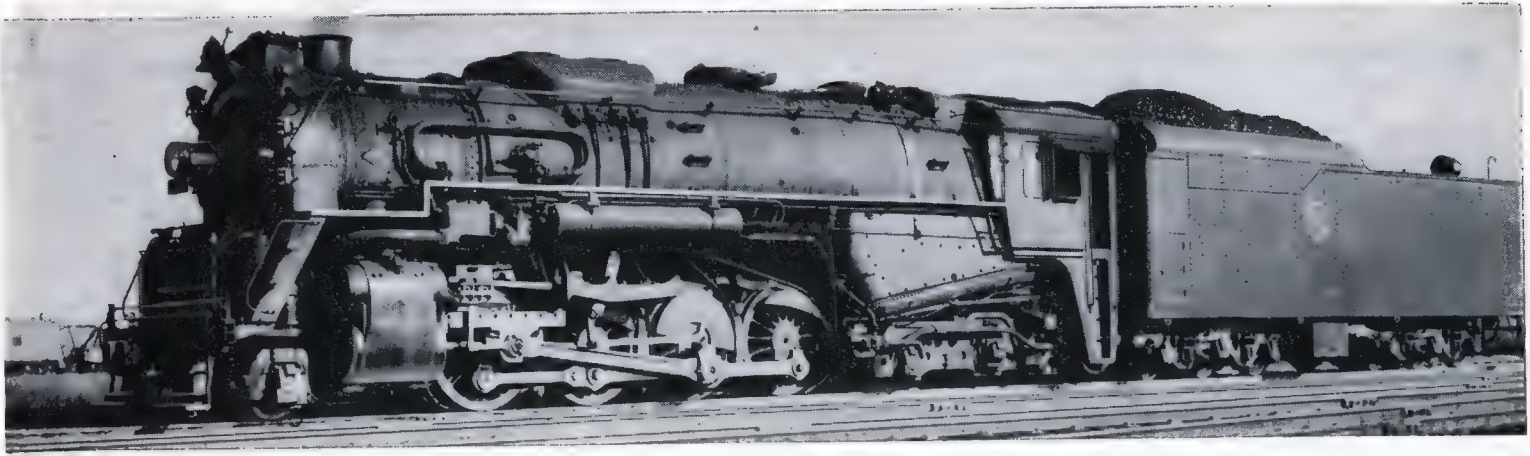
DT&L: Wilber

TOP *MIKADO.* No. 800 was first of a dozen 2-8-2s built for the road in the '40s



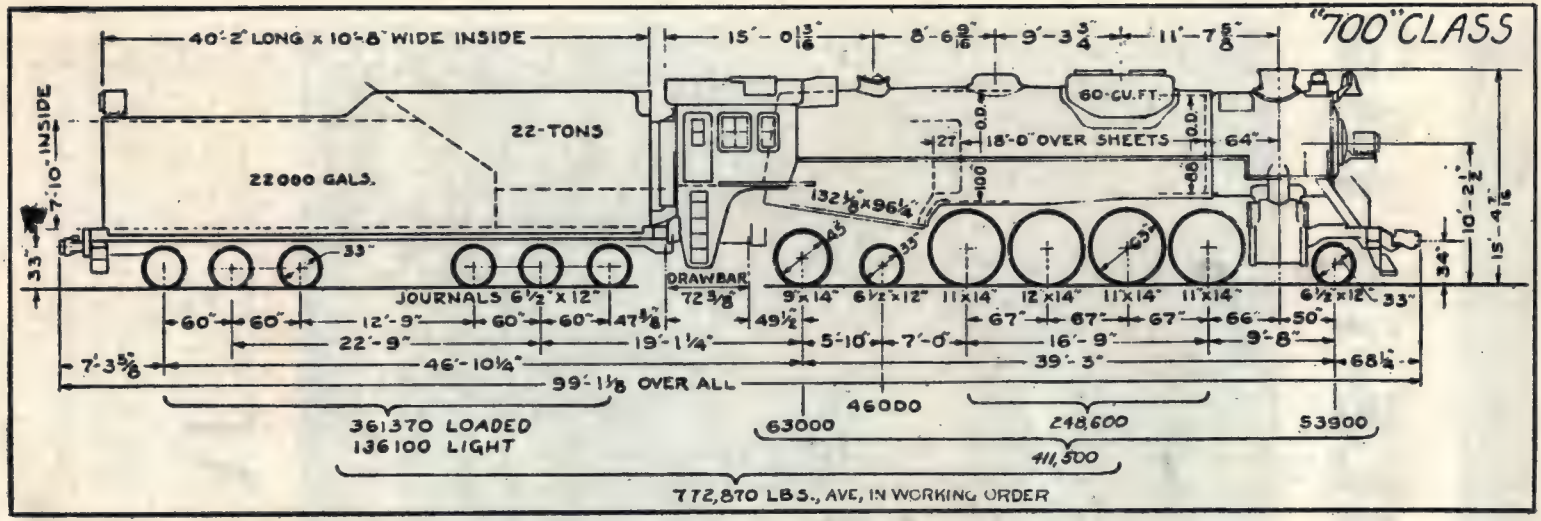
Baker

OFF-ROSTER CONSOLIDATION 415 is typical ex-Pennsy H-10 purchased in '29



DT&I: Wilber

HEAVYWEIGHT. Class 700 *Berkshires, above* and *next page*, almost 206 tons in weight, are the road's biggest engines



GENERAL	
BUILDER:- LIMA LOCOMOTIVE WORKS.	
YEAR BUILT:- 1935.	
BUILDER'S REF.- ORDER 1132.	
MAX. GRADE:- 2.1%	MAX. CURVE:- 26°
TRACTIVE EFFORT:- 65780 AT 85% CUT-OFF.	
FACTOR OF ADHESION:- 3.78	
PISTON THRUST:-	

BOILER	
BUILDER'S NUMBERS:- 7632-7635 & 7777-7778.	
WORKING PRESSURE:- 260 LBS.	
TUBES:- 77- 2¼ O.D. No 12 B.W.G.	
FLUES:- 202- 3½ O.D. No 11 B.W.G.	
ARCH TUBES:- 5- 3½" O.D. No. 7 B.W.G.	
DRY PIPE:- 9½" I.D. ⅜" THICK.	
INJECTOR:- ONE "SELLERS" TYPE SR.	
SUPERHEATER - TYPE E.	
STOKER:- "STANDARD" TYPE-MODIFIED B.	
FIRE DOOR "FRANKLIN" TYPE B-A.	
GRATES:- WAUGH EQUIPT. CO'S "FIREBAR"	
FEED WATER HEATER:- "WORTHINGTON" TYPE SA-5.	

LOW WATER ALARM:- "NATHAN" TYPE B.	
SAFETY VALVES:- 3- 3" "CONSOLIDATED" MUFF. SET AT 260 LBS. 1-OPEN SET AT 263 LBS. 1- OPEN SET AT 266 LBS.	

HEATING SURFACES	
FIRE BOX & COMBUSTION CHAMBER:-	318 SQ.FT
ARCH TUBES:-	48 " "
TUBES & FLUES:-	4127 " "
TOTAL:-	4493 " "
SUPERHEATING SURFACE:-	1795 " "
GRATE AREA:-	88.3 " "

MACHINERY	
FRAME:- 6" O.H CARBON STEEL SLABS.	
CRADLE BY GENERAL STEEL CASTINGS CO.	
ENG. TRUCK:- O.S. BRG TYPE BY G.S.C.CO.	
TRAILER TRUCK:- "DELTA" BY G.S.C.CO.	
"ALCO" LATERAL CUSHIONING DEVICE ON FRONT DRIVER BOXES	
CYLINDER DIA.- 25"	STROKE 30"
PISTON VALVE DIA.- 14"	TRAVEL:- 8"
" "	LAP:- 1 7/16" LEAD:- 3/16"

EXHAUST.- LINE & LINE.	
THROTTLE:- "AMERICAN" MULTIPLE. 1¾" LIFT.	
VALVE GEAR:- "WALSCHEART."	
CROSSHEAD:- MULTIPLE BEARING.	
REVERSE GEAR - ALCO TYPE "G"	
MECH. LUBRICATOR DETROIT MODEL "B" 12F 32PT	
FLANGE " DETROIT	

LOCO. NOS 700-705

D.T.&I.

MOTIVE POWER DEPT

700 703 11-33
704 705 12-33

REVISIONS

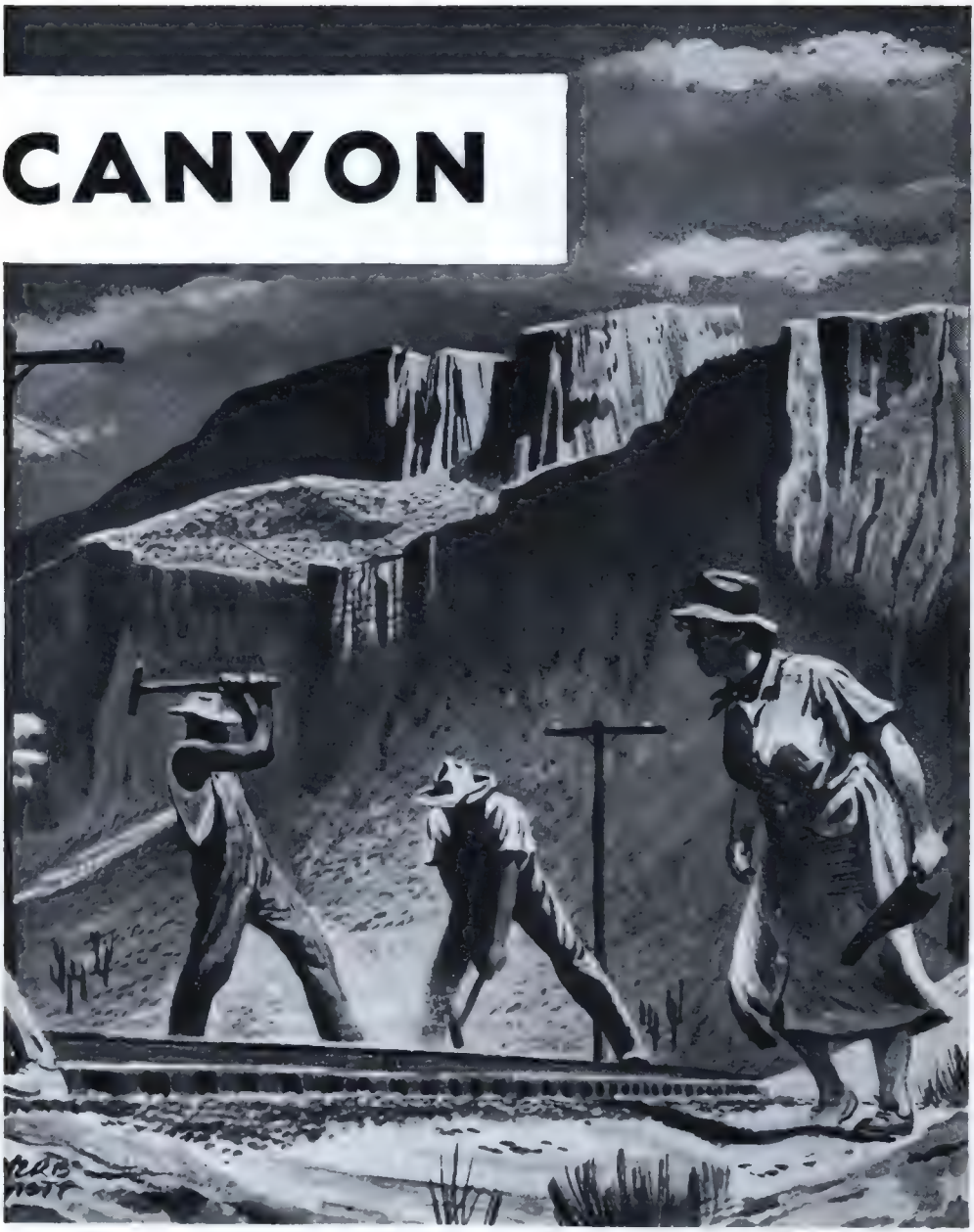
TROUBLE in the

Ma bullied the two men into working harder than they'd thought possible

CHARLES W. TYLER

MA HAD STARTED out to wash, but it seemed that this was just one of those mornings. A Mexican track worker's kid found a rattlesnake, the Martinez goat got hung up in the fence and the clothesline had broken. And now here was Jesus Ramirez, run-

CANYON



ning up the track, yelling his head off. It was unusual to see Ramirez moving faster than a snail's crawl—it must be something serious.

Ma straightened up from the washtub outside of the back door, suds to her elbow. "Now what in tunket's the matter?" Just then Charlie Dobbs, the operator, hurried from the telegraph office, shouting excitedly, but Ma's attention was on Ramirez.

"Meesa Parks! Meesa Parks, she's a broke rail!" Jesus Ramirez's gesture marked some place on the flat, west of

the huddle of buildings at Cottonwood Station.

Ma shed the soapsuds with a couple of vigorous swipes of her hands and put her head inside the back door for a quick look at the clock. Then hurriedly, she started down the path to the track, her thinking geared to the problems of the Canyon, a vital link in a transcontinental railroad. When things went wrong in the Canyon, traffic was snarled to the east as far as Desert Junction and to the west to the Big Town, the coast terminal.

If Big John Parks and his section gang had been working nearby the problem would have been simple, but Big John was up beyond Turkey Crossing, five miles away. There was no telling about the section gang at New Concord—even if the operator there could get word to them, it would take time to make the run on their motor-car to Cottonwood Station. In the meantime, the dispatcher would have the makings of a fine traffic tangle on his hands.

The single-track main line through the Canyon was burdened with defense transport, feeding materials and men to dockside for trans-shipment to flaming Korea. Delays were costly, and no one was more aware of this than Ma Parks, for her own flesh and blood was involved. Any day she expected to hear that Little John was shipping out.

Cottonwood Station wasn't much—just another place beside the track where railroad folks lived. It was off the highway and the nearest town, New Concord, was ten miles distant. The paint was flaking from the shabby little station, the pump house and other structures; tin cans and rubbish were piled in the gully behind the row of dingy track workers' dwellings. There were piles of track materials, stacked ties and outdoor plumbing facilities scattered about.

But Ma didn't mind; it was what she was used to. Ever since she had married John Parks they had been living in workers' houses beside the track. There was something about the Canyon that made you forget the unsightly trash. The pink dawn painting the eastern sky, and the sun exploding behind old Cockscomb, for instance. And there was nothing in the world like the desert air in the morning; it was like wine, and when you breathed it deeply you felt heady and on top of the world.

Come sundown, the high peaks donned their purple robes, the chaparral on the slopes turned into black velvet and the stars kindled into campfires on their range in the sky. The night wind coming down the Canyon was like the gentle rustle of satin. In the spring after the winter rains, no Easter altar was so beautiful as the steep, flowered slopes, aflame with the Lord's candles—the long, tapered clusters of yucca blossoms. With the sky arched above them it was like a blue-vaulted cathedra

THIS PAST YEAR, with Little John away at camp, for the first time, Ma was aware of the Canyon's loneliness. She would tighten up inside, stopping whatever she was doing to stare out to two snaky ruts which threaded the sagebrush, the road from town. She remembered how Little John used to come tooling his jalopy home from high school in New Concord, raising up the dust fit to kill. She missed setting his place at the table, missed mending his things and hunting for his eternally lost cap. And then, when it seemed like she was getting used to his being gone, she would let her eyes wander out to the corner of the whitewashed fence and there would be old Buster, his head on his paws, looking down the road.

"Sheesa mucha bad break," Jesus Ramirez was saying breathlessly.

Big John had gone, leaving Ramirez and Pete Castano to do some local work while he took the rest of the gang to Turkey Crossing. Castano was coming out of the tool-house with a red flag and Ramirez was jabbering away—something about the *Sun Coast Limited.*

Ma said, "Shut up an' le'me think!" She had been at Cottonwood Station a long time and when trouble hit she worked

shoulder to shoulder with Big John and his Mexican section hands. She knew railroading just like she knew the old-fashioned remedies that fixed up human ills. Her voice was rough and her heart was big. Her work-worn hands were as much at home helping heave a motor-car onto the rails as they were in the kitchen with the pots and pans.

Charlie Dobbs was running down the track from the telegraph office. He was a small baldish man, usually meek and tractable but now he was all excited about something. He was crying out to Ma in his high-pitched voice something about Dan Comfort. Dan was the operator over on the desert slope beyond Red Box Divide. Dan and Little John had grown up together—two kids, finding great adventure in the Canyon.

Ma's eye pounced on Charlie Dobbs and she at once began shouting at him. "You tell the dispatcher we got a broken rail west of the station. Say there's two track hands here an' we likely can get a new rail in ahead of the *Sun Coast* an' not tie up the railroad—"

"To hell with tyin' up the railroad!" Charlie Dobbs yelled.

Coming from Charlie, this was surprising and Ma stared at him. "You crazy or somethin'?"

"No, I ain't crazy!" Charlie cried. "You hear what I'm sayin'?"

"Stop your noise!" Ma shouted. "What's got into you, anyhow?"

"Dan Comfort say the *Sun Coast* picked up two cars of GIs at Desert Junction," Charlie Dobbs panted, "an' Little John is with 'em."

All of the blustery fire went out of Ma Parks and her voice fell to a whisper. "Little John?" She forgot the broken rail; she forgot everything but Little John.

Charlie Dobbs was rambling on. "A freight taking the siding stopped the *Sun Coast* and Dan got to talk to Little John a couple minutes. He didn't know which Pacific Coast port they was headed for until they was coupled onto the rear end of the *Sun Coast* at the junction. He sent word for you to be watchin' for him when they come through."

"Did he say anythin' about gettin' home 'fore he was shipped out?" Ma asked.

Charlie Dobbs wet his lips, gloomily shook his head. "Dan said Little John wasn't goin' to get a pass. They need them railroad battalions in a hurry, I guess, gettin' supplies to the Eighth Army."

LITTLE JOHN had been gone almost a year. He had been in training at a Transportation School in Virginia. Ma stared at Charlie Dobbs without seeing him. One of the things that had helped ease the ache in her heart had been looking forward to having her boy home again—for just a little while—before he went aboard the transport. And now, she wasn't going to see him. For an instant, her memory flicked the pages of the past—Little John, out there on a blanket in the sun—in his first trousers—starting school. Little John helping on the section during vacation. Blonde hair and freckled, with never a night that he hadn't kissed her or said his prayers.

Ma's glance went out along the shining rails to the passing track, and she saw the sleek cars of the *Sun Coast Limited* waiting there behind the diesel—maybe for half an hour. Maybe longer, if things got badly snarled in the Canyon. She hadn't realized until now how hungry she was for the sight of her son. There was cold rabbit in the icebox, apple pie in the pantry, home-baked bread, and loganberry jam. The things Little John had always liked best.

Her thoughts raced on, making a crazy pattern in which the broken rail had small place. What was a little time lost to the *Sun Coast Limited* and a couple carloads of soldiers? A mother had some rights. She hadn't raised her boy to go to war; she hadn't wanted this killing over there in a foreign place. If the mothers of the country had their way there wouldn't be fighting and dying, there wouldn't be those transports bringing home the sick and the maimed.

Ma's hands clenched and her eyes lifted to the high altars of the Canyon. It was big and clean, this Canyon of hers. It was peaceful here—a world far removed from the war-scarred hills and rice paddies of Korea. Ma's lips moved momentarily in silent prayer. How else could a mother decide?

Charlie Dobbs stared at Jesus Ramirez and shook his head. Jesus Ramirez wasn't sure what was happening but he sensed that *Señor Dios* had a part in it. He lifted his hat and crossed himself, his black hair framing his troubled face.

Ma's glance touched a canyon wall, cut to raw earth by flood waters. The Canyon, at times, turned savage, ruthless. Storms came and there were great yellow torrents tearing the Canyon apart. Folks had to fight for their homes, fight for their very lives. Then the storm clouds passed and track gangs cleaned up the wreckage on the line. Flood victims were buried, homes rebuilt and life went on.

Maybe wars, like storms and floods, were acts of God.

Ma closed her eyes, her fists tightened. This was her decision—hers alone. She prayed for strength.

"GO AND NOTIFY the dispatcher." Charlie Dobbs saw a light shining in the eyes of Ma Parks. "Tell him we'll have a new rail laid before the *Sun Coast* gets here."

Charlie Dobbs stared at her. "We can't do it. We got to have help, Ma."

"We got all the help we need."

The operator shook his head. He thought Ma had suddenly gone crazy. Pete Castano was coming back, having just put a red flag on the track. Ma gestured to him to hurry. Charlie Dobbs started toward the telegraph office. Once he stopped and looked back. Ma was heading for the little houses where the families of track workers lived, her big frame moving with long, mannish strides.

He heard her voice lifted, strong with urgency but calm. "Rosa! Louisa! Margarita!"

Rosa was changing a baby. Louisa was bent over the washtub. Margarita was patching her old man's shirt. "But, yes, mamá!" A wet baby could wait; washing could wait. When *Señora* Parks called, you answered, *muy pronto*. When there was trouble in the Canyon they worked side by side. What was happening now the Mexican women did not know—only that they were needed.

Pete Castano was helping Jesus Ramirez lift the work car onto the track; then it was moved opposite the spare rails that were kept at Cottonwood Station for emergencies. The weight of the rail was more than three-quarters of a ton and it was necessary to arrange skids. With Ma shouting, *"Uno, dos, tres, Alzar,"* the two track hands and the women took hold of the ponderous length of steel. They jabbered excitedly; they got in each other's way. Old Buster thought it was some kind of a game and ran back and forth, barking and wagging his tail.

The *Sun Coast Limited* was due to pass Cottonwood Station at 9:30; it was ten to nine now. The streamliner had lost perhaps five minutes waiting for the freight to clear the main line at Big Rock. Forty-five minutes until the *Sun Coast's* orange-and-red diesel would show on the curve east of the station.

Big John and his regular gang would have had no trouble at all in changing a rail in three-quarters of an hour, but now there were only two section hands, some excited Mexican women and Ma. The broken rail was down by the culvert, almost a quarter of a mile away.

Castano and Ramirez brought tools and threw them on the work car, and everyone helped push to start the car. It rolled easily for the grade was in its favor.

Ma was concerned about this. "Watch out now; don't let it get away from us!"

"Si Señora!"

THE WORK CAR carrying the new rail passed the switch that marked the end of the passing track, and Ma stopped and looked back. This siding was a mile long, passing the telegraph office and following the curve around. How long was

it going to take them to lay that new rail?

Charlie Dobbs came out of the telegraph office and hurried toward the west switch. When he was within shouting distance he cupped his hand to his mouth. "The dispatcher says if you can't make it, for us to head the *Sun Coast* into the siding and he'll let the first section of the green fruit train move. They can meet here instead of at New Concord."

Ma's lined face worked strangely. It was like an answer to her prayer. Castano and Ramirez could take care of tying in the new rail while she went past the station to the place where the last cars of the streamliner would be stopped. She would even have time to go to the house and put together some good things to eat.

It was like a dream, Little John coming home to the Canyon. Sometimes it seemed just yesterday that he'd gone away; then again, Ma felt, it was so long ago, that the "good-by" was lost in the turned pages of time. She had given up her boy without question; the country needed him.

Ma's slow thinking was cast in shadow, as she tried to find justification for the thing that was in her mind. The scales of justice, held blindly, didn't seem to balance sometimes. Her love for Big John Parks had brought her to the Canyon. Life here had been hard, measured by most standards. You worked from the time you crawled out of bed until you fell into it again. And if there was danger to the track you were up between times. Every pulse-beat was set to the rhythm of clicking wheels.

You lived with coal-oil lamps and a burned-out range. You heated water over a wood fire under the cottonwoods and scrubbed clothes on a washboard. Your best dress was calico and you had been wearing the same hat to New Concord for ten years. But she was wrapped up in Big John and Little John and she never felt sorry for herself; she wouldn't have traded her menfolk for a mansion on a hill.

All she asked for today was five minutes with her boy. Was it too much? Was it? Maybe it would be the last time

Round-Up Pete Sez:

"The man who did more to arouse us workingmen was the inventor of the alarm clock."

AND THERE'S NO TIME LIKE THE PRESENT TO WEAR A PAIR OF—

Carhartt

MASTER CLOTH Overalls

Bib overalls, Sanforized, with coats and work caps to match.

Lace back dungarees and waist overalls in long-wearing Carhartt Master Cloth blue denim.

Round-Up Pants —Western style blue jeans — for work or play.

Three generations of the Carhartt family have been producing work clothes exclusively for sixty three years—your guarantee of top quality, roomier cut, more experienced tailoring and thriftier economies.

Whether it's our exclusively made rain repellent, extra heavy Brown Ducks for those tough, he-man jobs—blue denims for farm and shop—lace back dungarees and waist type overalls—shop coats—Western style blue jean Round-Up pants for the kids—you'll find a size and style to fit you . . . fit your pocket book . . . and fit the job, too. Quality and price considered you can't beat Carhartt's for washable, durable, on-the-job comfort.

HAMILTON CARHARTT OVERALL CO.

Detroit 16, Michigan

Carhartt Park, Irvine, Ky. Atlanta, Ga. Dallas, Texas

she'd ever see him. Still, there were other mothers whose love, hopes and prayers were riding with their sons over every dreary foot of the red road to war.

Ma squared her shoulders, bit her lip—hard.

Charlie Dobbs was squalling at her, pointing at the bright steel of the passing track. "I'm goin' to put the streamliner into the sidin'."

"You ain't goin' to do no such thing!" Ma yelled. "The *Sun Coast* is highballin' through." She grabbed a heavy open-end wrench from the work car and attacked the nuts at a rail joint.

THERE WAS almost a ton of steel to be unloaded and fitted solidly into the gap made by the removal of the broken rail. Charlie Dobbs stared with unbelieving eyes. There were a lot of things he didn't understand; Ma Parks' behavior was one of them. Her voice, harsh and high, was arrowed at him now. "Get on up the track with that red flag!"

You didn't jerk out a mainline rail without flag protection. Charlie Dobbs started off at a trot, spurred by the diesel's horn whistling for a ranch road crossing out on Red Box Divide.

Working like a wild fury, with the tick of time pressing her on, Ma bullied the men into working harder than they'd thought possible. She mashed her thumb, and one of the Mexican women hurriedly tied a rag around it. Castano and Ramirez swung their spike mauls, sweat making little rivulets on their dark-skinned faces. The rail was about ready.

The Mexican women pushed the empty work car up the track, taking it off the rail near the tool house. They chattered like magpies. *"Poco Juan"*—Little John was on the streamliner; it would go through fast. *Mamá* would have only a small look at the *muchacho*. Life was sometimes hard in the Canyon, but always *Dios* looked down.

Ma gave the new rail a final check; then she sent Castano off to pick up the red flag he had put out to the west. Ramirez got the tools off the track, then went to get Charlie Dobbs, up on the curve.

Ma dragged her sleeve across her perspiring face. Blood dropped from her thumb and spotted the new rail. Her shoulders were heavy with weariness as she plodded slowly toward the telegraph office, to wait for Charlie Dobbs. When he came, she said, "Tell the dispatcher the new steel is in. He can let the trains roll, if he wants to." She stared sorrowfully into space.

Charlie Dobbs shook his head in wonder and dropped into his chair. Without a word he put on his telephone headset and cut in the transmitter. "Cottonwood Station. Ma an' them Mexican women an' a couple track hands got that rail in. Don't ask me how. The *Sun Coast* is coming along now."

Ma stood on the cinder fill beyond the telegraph office, a smudge on her face, straggly strands of graying hair hanging down. Her hands were grimed like a blacksmith's and her skirt had a tear. She was glad the *Sun Coast* was going to be traveling fast; Little John wouldn't get to see what a sight she was. Old Buster was beside her, rubbing against her legs, as if to console her for the thing that was happening.

The diesel showed on the curve, its orange and red bands making a bright splash against the tawny walls of the Canyon. The horn trumpeted and Charlie Dobbs cleared the order board over the telegraph office.

The *Sun Coast* raced by, a blur of sleek cars; then the vestibule of the last car flashed past. Ma had a glimpse of a familiar blonde head, a freckled face. Little John's voice rushed at her, then was lost in the clatter of wheels and the hard gush of air. Little John blew her a kiss with both hands, then waved furiously as the train rushed down the track.

Ma thought she was going to start bawling, but she didn't. She gave Little John the old highball sign of railroaders, and stood there staring after the disappearing train.

NOT ON THE WHEEL REPORT **JOE EASLEY**

"Salami on rye an' a piece a' apple pie!"

Daily Except Sunday

AS THE CROW FLIES, it's only 26 miles from Ahoskie to Windsor, N. C. But the Carolina Southern Railway has no wings and it takes much longer than any crow to get there. The short line casually bends through patchworks of tobacco farmland and boondocks of mumbling scrub pine trees. Folks beside the roller coaster tracks are quick with a hello and when they extend their hands, it's for a greeting and not a dollar. Before the present standard-gage line was chartered in 1926 you could board 3-foot gage coaches with your sack lunch, which was sure to be seasoned with peppery cinders. Even before the slim-gage pike—called the Wellington & Powellsville—was organized in 1893, the predecessor Cashie & Roanoke River Railroad chuffed to a bustling start in 1887. Today, well that's something else. A freight train roundtrips it daily except Sunday, of course, and then the whole railroad takes a day off.

Many of the items sentimentalists value are retained from the past. This suits the Carolina Southern just as well. One of the two steamers, Engine 100, carries a name—*R. P. Slaughter*—under the windows of the cab, honoring the company's superintendent and master mechanic. This *Mogul* locomotive also supports a gigantic headlight, nearly as big as a merry-go-round. The lamp seldom burns. They try to have the train home by dark. Neatly

Comes 3:30 Or So and the Carolina Southern Banks Its Fires and Puts Its Trains to Bed

Photo Story
by H. Reid

BEARING the neat nameplate of Carolina Southern's superintendent and master mechanic, the *R. P. Slaughter* (Engine 100), *left*, takes Sundays off, but come Monday morning at 8:30 the squat little *Mogul* itches to make her round trip from Ahoskie to Windsor and back. *Ten-Wheeler* 104, *below*, the road's other locomotive, finds Askewville about as long, or short, as the train she's pulling, although you can't beat the hamlet for scenery, serenity and friendliness

CAROLINA SOUTHERN'S main line at Cremo isn't exactly a double for the Virginian's or Norfolk & Western's. Pole derrick, *right*, loads timber on flatcars, lumber being a product the CS counts on heavily for revenue. Legend behind settlement's name of Cremo is that founder opened a store, sold many Cremo cigars; happy over income, he tacked the brand name to the village. Story is unfounded, of course, but it sounds neat anyway, and who are we to let a few facts stand in the way of a good story?

stencilled on the 2-6-0's tender is the silvered legend, The Carolina Southern Ry. Co. Not just plain Carolina Southern.

A second locomotive, No. 104, is called the big engine." The erstwhile Laurenberg & Southern *Ten-Wheeler* rides behind two more pilot wheels.

Reflecting another taste of moderate antiquity is the weather-caressed wooden caboose which played coach for a while after the Carolina Southern assumed a standard-gage role. The aging car now houses express and small packages. Attentive handling of caboose fare eliminates chances of a damage claim.

Accidents don't happen, either.

"Too busy to fool with them," CS confesses.

Worst wrecks befalling the railroad are frequent decapitations of weeds which somehow raise their flowering families between tracks. Cows don't stray in the way any more, but once in a coon's age an engine may split a switch.

Seldom do these setbacks retard adherence to the dictate of Ahoskie to Windsor by noon. At 12 on the Windsor wye, all work stops while everybody, including the engine, gulps lunch. The fireman nuzzles a skinny pipe into the tender and a pump sucks water from a neighboring stream like julep through a straw. Refreshed, the engine noses about on the wye, clasps the train under a row of trees forming a leafy tunnel and mosies toward Ahoskie again. By 3 or 3:30-ish, the fire is banked and the railroad is put to bed. Soon, however, the Carolina Southern's old-timey recipe will dissolve—a diesel is about to encroach on nostalgia.

CATCH THAT NAME on the *little engine's* tender—The Carolina Southern Ry. Co., no less. Atlantic Coast Line painters attend to such trimming plus major steam repairs at Rocky Mount

THE R. P. SLAUGHTER'S big headlight isn't needed, because of the CS' early bedtime. The sporty *Mogul* contributes a bit to an ACL local freight (tender of ACL *Pacific* at *right*). Scene: Ahoskie

AROUND 2 O'CLOCK ANY WEEKDAY AFTERNOON you'll find No. 104, *the big engine*, drifting past the tobacco curing barn at Cremo

TEN-WHEELER turns on the Windsor wye. Colorful? Water in the background is dark red, dirt road in foreground a brilliant orange. No fooling!

On the Spot

Our Readers Talk It Over With the Editorial Crew

PREVIEW of a revolutionary type of coach was given to presidents and other officers of 15 Class 1 Eastern, Western and Canadian railroads on a special speed run of 48 miles over Chesapeake & Ohio tracks from Fort Street Union Depot, Detroit, to Plymouth, Mich., and back. Special switchmen guarded grade crossings during the passage of this C&O train, a low-slung *Train X* coach, pulled by a conventional 2000-hp. diesel locomotive.

The run was made to encourage the cooperation of guest roads in building 40 such cars and two locomotives to prove the value of *Train X* in revenue passenger service.

Development of *Train X* with its single axle, trailer-type cars was started by the C&O in 1947. Its object was to cut sharply the cost of manufacturing, maintenance and operation of passenger trains. Pullman-Standard Car Manufacturing Co. became interested in Jan. 1950. With C&O designs, it built the *Train X* car used in the test run and the adapter car to which *Train X* couples. The car, officials say, could make up to 150 miles per hour.

This unique coach is 31 feet long—one-third the length of ordinary coaches. Its floor is 2½ feet nearer the rails and its roof is lower by 3 feet. C&O brass hats claim that *Train X* would save enough to pay for itself in 2 to 4 years of mainline passenger service. They say the savings would result from weight reduction (one-third of present lightweight equipment), simplification of mechanical design, and the placement of most of the mechanical equipment, now carried under each car, in a single head-end car.

* * *

NEWS BUTCHERS should form an organization of their own, according to Dr. R. D. Haire, 706 W. 2nd St., Roswell, N.M., who writes:

"I read *Railroad Magazine* with pleasure. It recalls the days of my youth when I was a news butcher on a train of the old Kansas City, Clinton & Springfield (now Frisco Lines), running between K.C. and Springfield, Mo. As this train was made up in Clinton, the halfway mark, I could make the run and still spend my nights at home. It left early in the morning and returned the same evening. One day I would go to K.C. and back, the next day to Springfield and back.

"On Sundays we all stayed home. The line was about 200 miles long. Our train was pulled by a Civil War relic converted to coal-burning, a 2-4-0 that had a hard time keeping up steam in cold weather. We had a wooden baggage car, a day coach, and a men's smoker in the rear of which I kept my supplies.

"Our crew was not averse to fun. One day, when I was a little late, they backed the train over the wye, giving a merry toot on the whistle and a little extra widening of the throttle as I puffed down the track trying to catch up with them. After I had just about set a record for 16-year-olds, they finally let me climb aboard. On another occasion they held the train late on a return trip in Spring-

C. R. Waterman, Grand Rapids, Mich.

THREE VIEWS OF TRAIN X, new experiment in coaches developed by C&O, on Pere Marquette tracks near Grand Rapids, Michigan. Officials claim maintenance costs would drop sharply because of simplification of mechanical design, like concentration in single head-end car of all mechanical equipment. Spain was first with this type of rolling stock

FIDDLETOWN & COPPEROPOLIS RY.

No. 50 Sale of F & C Rumored as Welcome Mat is Unrolled for Robert R. Young and Alleghany Officials

by Carl Fallberg

field, waiting for me to come back for the newspapers I had gone after.

"There must be many surviving today, who in the past removed cinder from their eyes, hunted up chewing tobacco for farmers, and, besides making the world's worst sandwiches, collected newspapers from the car seats for resale. In this day of fraternal orders, clubs, and associations of all kinds, why not start a new one? It might be called 'The Ancient and Honorable Order of Former Railway News Butchers.' The old-time news butcher is a symbol of the past, but he played a useful role in his era and many people remember him, not unkindly."

We'd like to print some reminiscences from other men who used to be news butchers, and we'd like to know what you fellows think of Dr. Haire's suggestion to form a national organization.

* * *

STEAM power still predominates in and around South Charleston, W. Va., reports Granville Thomas, 31st St. and West Ave., Ocean City, N.J. Returning from a trip to that point, he enthuses over the long coal trains of the C&O, the New York Central, and the Virginian that pass through it, headed both east and west.

"A westbound train I saw had 125 cars of coal," he writes. "The next one had 135 cars of black diamonds headed east. It seemed strange. The *Hudson* type engine No. 306 on a local C&O train I photographed is one of several steamers just displaced by diesels. They pulled the system's three main passenger trains and are beautiful engines. It's a shame they had to go."

* * *

MINNIE R. WEBB, known as "the Sunshine Girl," the little cripple who used to wave at passing Illinois Central trains from her tenant farm home near Covington, Tenn., died of meningitis at 19. IC trainmen and Shriners, led by Condr. John W. McNamara, had previously paid for her transportation and treatment at a St. Louis hospital, as a result of which she was able to walk for the first time, with crutches.

* * *

OLDEST pensioned rail in this country, Samuel Mulholland, who expects to be 102 on October 28, is spry and healthy, fond of hanging around the railroad depot to watch the trains come in, and willing to talk about his 50 years and two months of PRR engine service to anyone who will listen. Readers wishing to send the old fellow a railroad-picture card for his birthday should address the Old Persons Home, Erie, Pa. Friends gave him a toy caboose and a blinker signal on his 101st birthday. He has 2 daughters, 7 grandchildren, 8 great-grandchildren.

"Once," he recalls with a grin, "another train backed into mine, breaking open a carload of Lake Erie whitefish. They looked mighty good and there were thousands of them. It was company rule to wait for inspection before touching those fish, but we had quite a fish fry in the caboose while we waited."

A write-up of Mr. Mulholland appears in the first edition of *The Pennsy*, a new, well-illustrated, 9¼x12-inch, 24-page house organ of the Pennsylvania Railroad, the lead feature of which recounts the history of recently-abandoned Broad Street Station, Philadelphia.

* * *

CAMPAIGNING for a Presidential nomination "ain't what it usta be." An *Associated Press* photo showed Eisenhower leaning, with some difficulty, out of the narrow rear emergency door of a Santa Fe streamliner to shake hands with well-wishers at Emporia, Kan. Remember the days before air-conditioning, when candidates made speeches from the cinder-pelted platform of an observation car?

* * *

TWIN hoggers, Miller and Will McCann, were among the 63 Illinois Central employes who, having completed 50 years' service, received gold passes

Dallas A. Gilbertson, Van Nuys, Calif.

TEARS AND CHEERS for SP's 3002, last but one of company's 4-4-2s, scrapped at its Los Angeles general shops. The *Atlantic*-type was one of six listed in June 1950 *Railroad Magazine* SP locomotive roster

this year, good for travel anywhere on the IC. Both men began their careers in the Paducah, Ky., roundhouse. Both served as engine wipers, hostlers, and firemen before being promoted to the right side of the cab. Both have always worked on the Kentucky Division, belong to the same church, and are married but childless.

Even more unusual are the Hilton sisters, Daisy and Violet, joined together by a flesh band somewhat like the famous Siamese twins of long ago. These girls presented a ticklish problem to passenger conductors until the Northern Pacific's auditor, E. J. Johnson, ruled that, although the twins occupied two seats, they should pay but one fare.

Said he: "The girls are inseparable. Wherever one goes the other must go."

* * *

CAFETERIA diners are now being used on Britain's railways. The quick lunch counters with stand-up service on trains have been adopted by the nationalized rail system to cut costs. Old third-class coaches are being converted into meal cars.

LAST of the serviceable *Atlantic*-type steam engines on the Southern Pacific, the 3002, has been scrapped at the company's Los Angeles general shops, laments Dallas A. Gilbertson, 15939 Sherman Way, Van Nuys, Calif. Six *Atlantics* were listed in the SP's roster published by *Railroad* in June '50.

"No. 3002 was one of a group built from parts of older 4-4-2s plus new cylinders, boosters, trailer trucks, etc.," he writes, "at Sacramento in 1929. Another *Atlantic,* the 3025, which can hardly be called serviceable in a motive-power sense, is now being used as a stationary boiler at Indio, Calif. Her pistons, air pump, injectors, etc., have been removed and will probably never be re-installed. Like the 3002, she boasts 81-inch drivers, the SP's highest."

* * *

RENOS RIDE AGAIN. Re-enactment of America's first big-scale train robbery, which occurred at Seymour, Ind., on October 6, 1866, was a recent feature of Seymour's centennial fete. The holdup of the mail train 86 years ago marked the beginning of this peculiarly American

form of banditry which terrorized the Midwest and Far West for several decades. Even today, the train stickup is common in Western movie thrillers.

The Reno gang robbed the Ohio & Mississippi, which has since become part of the Baltimore & Ohio's main line between Baltimore and St. Louis, but paid for their daring by being hanged. The B&O supplied an old historic locomotive and three wooden coaches with open platforms from its railroad museum at Baltimore for use in the mock holdup.

* * *

NO DEATHS or injuries have been chargeable to rail transportation of great quantities of explosives, commercial or military, during the past thirty years in the United States and Canada. Last year, the consumption of commercial explosives alone, in these two countries, exceeded 827 million pounds.

The roads also move large shipments of dangerous articles other than explosives, such as acids, electric storage batteries, benzine, chemicals, various compounds, compressed gas, matches, oil, gasoline, phosphorous, and poisonous liquids. Only one fatality resulted from the rail shipments of any of these articles last year: a gasoline fire and explosion killed a railroad man.

* * *

1530 PERSONS were killed and 7842 injured by motor-vehicle accidents at rail-highway crossings last year, most of them caused by automobiles ramming into the sides of trains.

* * *

GREAT NORTHERN trains used to climb the Cascade Mts. via switchback, 101 persons died in the snowslide tragedy of Wellington, Wash., at the west portal of the old Cascade Tunnel, and the Lake Chelan area in the same state was surveyed by the NP for a cross-Canada route in 1870. These are a few of the highlights in a fascinating new book, *Rails Across the Cascades*, 64 pages, 9x12 inches, illustrated with photos, maps and drawings, $1, World Publishing Co., Wenatchee, Wash. The author, Eva Anderson, is a member of Washington State House of Representatives and has written eight other books on history and lore of the Northwest.

"During legislative sessions," she tells us, "I spent countless hours in the archives of the State Library. It's amazing that one little book required such colossal effort."

Among those who helped her with this book is Walter Thayer, Box 1588, Chelan, Wash., who often writes to *On the Spot* department.

* * *

MODERNIZATION. A freight rail-yard employing automatic switching and retarded speed control has just been put into service at Milwaukee, Wis., by the Milwaukee Road. It is called the "Air Line" classification yard and is used for making up or switching freight trains. By pressing a button on a panel before him, the tower man can route a car by gravity from the top of the grade where a switch engine has pushed it, to any one of 24 classification tracks or to the rip track. These tracks range in capacity from 26 to 66 cars each.

The new switching equipment cost about $3,000,000 and was designed to classify 2400 cars in a 24-hour day. Automatic mechanisms control a network of electro-pneumatic switches and car retarders located along the tracks. Braking pressure is applied through these retarders against the car wheels. Buttons on the control tower permit the operator to vary a car's speed between 4 and 10 miles per hour as it comes from the retarder, depending upon how heavily loaded they are and how easily they roll. The grade gradually slows the cars down to a stop.

A pneumatic tube system more than two miles long is under construction to transmit waybills and other records. The yard is already equipped with a radio system for directing locomotive movements, a "paging" and "talk back" loud-

speaker system for ground personnel, teletype communication to transmit data concerning shipments, tape-wire recording to list the location of cars in trains, a pit to permit the inspection of cars' running gear, an oiling system to lubricate journal boxes, and floodlights for night operation.

This modernization is speeding up work and reducing *per diem* charges—*i.e.*, the

Robert A. Selle, Lafayette, Indiana

LEGACY. NKP diesel No. 52, *above*, inherits number from 0-6-0 switcher No. 52, *below*, now scrapped. Steam hog, built in 1916 by Brooks (Alco), antedated diesel by 35 years

Don. C. Burkhardt, Lafayette Ind.

sum one road pays another for using its freight cars—and is cutting loss to lading and damage to cars.

Somewhat similar is the yard improvement nearly completed by the Southern Pacific at Roseville, Calif., largest terminal yard in the Far West, with 49 classification tracks and a capacity of 2517 cars at a time. It is estimated that as many as 7500 cars can be switched at Roseville in a 24-hour period. The yard is named for M. L. Jennings, a veteran division super. Joseph Felix, 208 Pleasant St., Roseville, says the job will be completed this year.

* * *

NICKEL PLATE ROAD in 1950 renumbered some 6-wheel switchers into the high 300s; these latter numbers were formerly assigned to old Class G-44 *Consolidations,* now scrapped, reports Robert A. Selle, 509 N. 7th St., Lafayette, Ind.

"Many fans may have seen or photographed some of these 6-wheelers," he states, "without knowing they were the same engines renumbered. To keep the record straight, here are conversion numbers, etc., on the 6-wheelers:

"Old No. 50 is now 387; 51—388; 55—389; 57—retired, sold; 60—390, sold Aug. '51; 63—392; 64—393; 66—retired; 68—394, sold Dec. '50; 71—395, sold Aug. '51; 73—396; 74—397; 75 and 77—retired; 80—398; 81—399; 100 and 101—retired.

"Three *Pacifics,* 161, 167 and 168, were sold. So was 8-wheel switcher 217. *Consolidations* 379, 380 and 384 were renumbered 930, 931 and 932 respectively. Three other *Consolidations,* 486, 488 and 493, were sold May '51. My data came from a recent NKP handbook."

* * *

BILL KNAPKE, retired Southern Pacific conductor, Bellflower, Calif., writes: "I'm feeling pretty blue tonight. I've just returned from the funeral of one of my oldest and closest friends, E. G. Burdick, whose career I told recently in a *Railroad Magazine* serial, 'The General Manager's Story.' Thus the fast-thinning ranks of those storied wanderers of the rails, the boomers, is further depleted. All too soon that picturesque character of American railroading will be a memory.

"I worked under Mr. Burdick away back in 1908 when he came to the Inter-Calif. as trainmaster and I was running a work train finishing that road. We became good friends, as did his wife and mine. Our daughters were playmates. It was a liberal education to hear him talk of railway officials past and present."

* * *

AFTER signing millions of New York Central documents and billions of dollars in bonds for the Central and affiliated companies, Joseph M. O'Mahoney has just retired as a director and secretary of the company with a service record of 52 years. He started as a clerk. He says he made the task of signing documents easier by adopting a signature that permits him to sign without once lifting pen from paper.

AMAZING THING! By Cooper
SENSATIONAL NEW TING CREAM FOR FOOT ITCH (ATHLETE'S FOOT) - REGULAR USE HELPS RELIEVE ITCHING - SOOTHES BURNING BETWEEN CRACKED PEELING TOES - AIDS HEALING AMAZINGLY!
FIRST USED IN HOSPITALS NOW RELEASED TO DRUGGISTS GUARANTEED
TING MUST SATISFY YOU IN A WEEK - OR MONEY BACK!
IN LAB TESTS TING CREAM PROVED EFFECTIVE IN KILLING SPECIFIC TYPES OF ATHLETE'S FOOT FUNGI ON 60 SECOND CONTACT!
EVEN IF OTHER PRODUCTS HAVE FAILED TRY AMAZING TING CREAM TODAY! GREASELESS, STAINLESS
Ting
ALL DRUGGISTS ONLY 60¢ A TUBE

NEW TUNNEL, bored through the mountains three miles east of Clarksburg, W. Va., at a cost of $4,000,000, has just been opened by the Baltimore & Ohio. Begun two years ago, it replaces a structure built in 1853, when the rail line was first laid as the Northwestern Virginia RR. The old tunnel had room for only one track; the new bore is double-tracked. Two reverse curves have been eliminated.

DISCONTINUANCE of five trains operating between Camden and Tom's River, N.J., and three between South Pemberton and Tom's River has been authorized by the New Jersey State Public Utility Commission. The Pennsy and the Pennsylvania & Atlantic were ordered to furnish trucks for freight service over those routes until Railway Express Agency could take over.

Steve Maguire

NO MORE. This is one of the eight Pennsy trains discontinued by the Pennsy, with the blessings of the New Jersey State Public Utility Commission. Scene: Keswick Grove

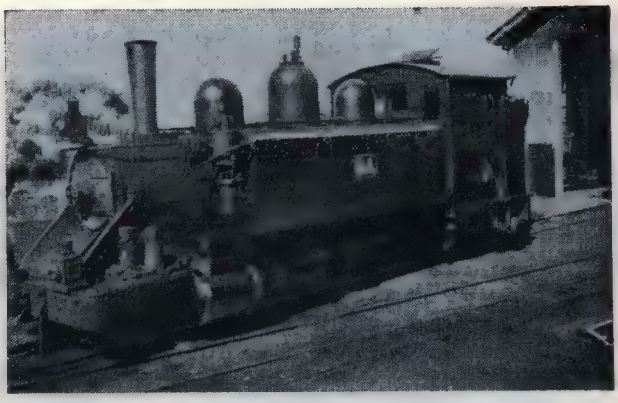
FRUSTRATED FAN. "It gives me the heebie-jeebies to see the growing diesel rosters and the waning of steam power," asserts Gene Miller, c/o Smith & Butterfield, 305 Main St., Evansville 2, Ind. "We of the engine-picture crowd are prevented from snapping pictures of locomotives that will not be available much longer. Why couldn't some of us get credentials permitting us to make shots?"

"I have been shooting locomotives and trains for many years, and am planning a vacation trip to the West Coast in December. I have permission to take pictures at the Los Angeles yards, but would like to stop also at Albuquerque, N.M., Roseville, Calif., and Cheyenne, Wyo. I'd be happy to make my collection available at cost. I work with pictures often, as foreman of a photo-finishing lab."

At just about the same time the Staten Island Rapid Transit Co. notified the Public Service Commission of New York State of its intention to discontinue all passenger service. The road said it could no longer compete with city buses.

* * *

MONDAY HOLIDAYS. The National Association of Travel Organizations, in cooperation with others, is sponsoring efforts to bring about the observance of most of our major national holidays on Mondays, pointing out that "Mid-week holidays result in a serious loss of efficiency by absenteeism on days following."



ONE OF A PAIR. This Beyer-Garratt articulated locomotive has been running in Australia for the past quarter century

Ian R. Barkla, Australia

AUSTRALIA heard from. "Our narrow-gage railways were built mainly in mountainous country, where the cost of building a broad-gage (5 feet, 3 inches) was prohibitive," writes Ian R. Barkla, Blackwood, Collier Ave., Upeney, Victoria, Australia. "Often these lines would have a 3-chain radius curve while ascending a one-in-30-foot gradient. Speeds vary from 10 to 20 miles per hour. In 1926 two Beyer-Garratt articulated locomotives were imported from England to supplement smaller narrow-gage engines."

A RECENT SUPREME COURT ruling forbids railroad Brotherhoods, under the Railway Labor Act, from "using their power" to "destroy colored workers' jobs in order to bestow them upon white workers." The decision, stated by Justice Hugo L. Black, holds that an arangement between the Brotherhood of Railroad Trainmen and the Frisco Lines threatened Negro train porters "with loss of their jobs because they are not white"; that the Brotherhood had long tried to supplant Negroes with whites.

SNOW SWEEPER. A weather-battling car, this sweeper belongs to the Staten Island Rapid Transit Railway, the B&O-controlled road on Staten Island within New York City limits. The SIRT wants to discontinue all passenger service because it can't compete with city-subsidized buses

Frank Quinn, Woodhaven, N. Y.

Missouri Pacific

BALLING THE JACK. With many of our readers, we can't help but wonder if such colorful railroad expressions will not die out with the picturesque steam locomotive and its lordly plume of smoke. The diesel may be more efficient but it is certainly not as photogenic. Incidentally, MoPac's Extra 81, with No. 2118 on the head end, was snapped some time back, KC-bound

COMPLAINT. "I read the very first issue of *Railroad* that came out in October, 1906, when it was called *Railroad Man's Magazine,*" writes George A. Tunison, Southern Railway engineer, 109 Webster St., Valdosta, Ga., "and I was a smutty-faced fireman on the old Mobile, Jackson & Kansas City (now GM&O).

"We old fellows don't often let our wants be known, but I can't keep quiet any longer.

"What is the magazine coming to? I've been holding on for the past few years, thinking it would get back on the right track, but it seems like a semi-technical journal now. Give us the kind of magazine we had in the 1930s. The brotherhood journals put out all the mechanical and technical reading we want. What we want in *Railroad Magazine* is entertainment, not education. Give us more entertaining stories, fact or fiction."

* * *

HAWAII HEARD FROM. "I was pleased to note Fred Stindt's photo of Lihue Plantation Engine No. 4 in June *Railroad.* The Hibiscus & Haliconia Short Line Railroad Club went to Lihue, Kauai a while ago and enjoyed a fan trip over the plantation system," writes a member of the club, Robert A. Ramsay, 3612 Woodlawn Drive, Honolulu 14, T.H.

"Their railroad department manager is so proud of his diesels that it took quite a bit of talking to convince him that we wanted steam power for our trip. So they cleaned up No. 4, a 6-wheeler. As I am a summer fireman for the Oahu Railway & Land Co. in Honolulu, I fired the 4-spot

for most of the trip, while some of us took turns at the throttle.

"This plantation operates about 30 miles of 30-inch gage track, laid with 35- to 65-pound rail. Regular motive power consists of four MU-equipped diesel-electrics and three diesel-mechanicals. There are about 20 or 30 flat-cars and 1000 4-wheel cane cars. All dispatching is done by two-way radio-telephone."

Mr. Ramsay tells us about another fan-trip taken by his club: "At the invitation of the 14th U.S. Naval District, we inspected the Oahu ammunition depot and took a ride on its railroad. The Navy, we learned to our surprise, maintains a complete, modern, 3-foot-gage railroad on Oahu, with about 88 miles of track, 16 diesel locomotives, and more than 600 steel cars—flat, tank, box and gondola—plus an old wooden 40-foot passenger coach that once belonged to the Oahu R&L Co.

"Trackage extends from Pearl Harbor Naval Shipyard through Halawa, Pearl City, Waipahu, Ewa, the Barber's Point Naval Air Station, and up the coast through Nanakuli to Lualualei. Most of the rail is 60 and 70 pounds, but I noticed some of 90 pounds. There are two branches. Most trackage is former Oahu Railway main line. Locomotives are diesels left over from World War II."

* * *

FAN TRIP. Billed as "the last steam train ever to run over this branch," an "Old Time" excursion train was operated by the Louisville & Nashville over its Springfield, Ky. route for members and friends of the National Railway Historical Society, Louisville Chapter. The coaches were wooden, with open vestibules and pot-bellied stoves.

* * *

RAY H. CLUTTER'S piece, "Opportunity on the Railroad," in our July issue evokes this comment from Samuel H. Lewis, 8013 E. 3rd St., Vancouver, Wash.:

"When trying to get a railroad job, I was annoyed to be told there was nothing

ONE DOLLAR SPENT FOR THIS BOOK MAY SAVE YOU HUNDREDS IN CAR REPAIR BILLS!

Here are 1,000 facts and hints on how to keep your car running smoothly... to save gas, oil, tire wear, etc. Told in simple, easy-to-follow words and pictures. Look!

LUBRICATION
When, what and where to lubricate.

BRAKES
How to operate, adjust, clean and lubricate.

THE ENGINE
Adjusting valve tappets, tuning-up, preserving the motor.

THE COOLING SYSTEM
Care and repair of the water pump, fan belt.

THE ELECTRICAL SYSTEM
Operation of the battery, generator, starter, spark plugs, etc.

THE FUEL SYSTEM
How to get the most mileage out of each gallon of gas.

THE CLUTCH
Operation, "play", failure to disengage, cause of noises, fluid drive.

LIST OF HAND TOOLS
HUNDREDS OF OTHER USEFUL HINTS

QUALITY AGENCY
214 East 49th Street
New York 17, N. Y.

Gentlemen: Send me postpaid —— copies of the "CAR OWNER'S GUIDE" @ $1 each. I enclose $—— (Cash, Check or Money Order—Sorry, no C.O.D.'s) If I am not satisfied I may return same within ten days and my money will be refunded.

NAME .....

ADDRESS .....

CITY .....ZONE.... STATE.....

Miniature Live
STEAM LOCOMOTIVES

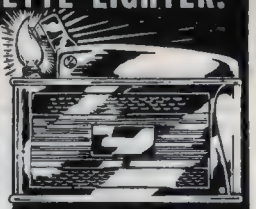
1952 CATALOG. Listing 1½", 1", ¾", ½", & ¼" (O-gauge) scales. ALL CASTINGS, RAIL, STEAM FITTINGS, etc. EXCELLENT DRAWINGS—EVERYTHING FOR STEAM LOCOMOTIVES. Thorough Drawings and written instructions covering "Step by Step" method of construction:
¾" scale, 3½" gauge, 4-6-4 & 4-8-4....$3.00
½" scale, 2⅛" gauge, 4-6-2 & 4-8-2....$3.00
¼" scale, (O-gauge) 4-6-4 & 4-8-4....$3.00
Send for COMPLETE 80-page catalog today. 50c per copy.
LITTLE ENGINES Box 15-C Wilmington, Calif.

ON 2 TEN INCH RECORDS
The Story of
Engineer Casey Jones' Last Trip
Related personally by his fireman
SIM T. WEBB
"I was Casey's fireman that night and will tell you what happened"—*Sim*
2—10" Vinylite Records—78 RPM (High Fidelity Recordings)

$4.25 Per Set
Pay postman plus postage, or send cash, check or money order and we ship prepaid.

DAVIDSON-CLAY CO.
2105 Sterick Bldg.
Memphis 3, Tenn.

AMAZING VALUE!
Save Up To $11.50 With This New
AUTOMATIC
CIGARETTE LIGHTER!



Imagine! The same style lighter you've seen for as much as $12.50—yours now for only $1.00! Slim, modern case in gleaming chrome finish is suitable for engraving. Double size fluid well. Fully automatic flick-of-a-finger safety action. Order several . . . NOW! Satisfaction guaranteed or your money back.

ONLY $1 Postpaid (No c.o.d.'s)

ORDER NOW!

M. MARTIN & CO., Dpt. A-1
5 So. Wabash Ave.
Chicago 3, Ill.

Please send, postpaid, ... lighters @ $1 each. I am enclosing $..... full payment.

Name .....

Address .....

City ..... Zone.... State.....

WANT TO MAKE REAL MONEY?

YOU CAN POSITIVELY MAKE $50 A DAY AND UP

SELL a brand new item going to every type of food and beverage store, factories, laboratories, hospitals, etc. Sustained by national publicity program.

SAMPLES FURNISHED

UTILITY DURAWEAR CO.
53 W. Jackson Blvd., Dept. PFG-11, Chicago 4, Ill.

ACCOUNTANT
BECOME AN EXPERT

Executive Accountants and C. P. A's earn $4,000 to $10,000 a year. Thousands of firms need them. We train you thoroly at home in spare time for C. P. A's examinations or executive accounting positions. Previous experience unnecessary. Personal training under supervision of staff of C. P. A's. Placement counsel and help. Write for free book, "Accountancy, the Profession That Pays."

LASALLE Extension University, 417 So. Dearborn St.
A Correspondence Institution Dept. 10334H, Chicago 5, Ill.

Learn Profitable Profession in 90 days at Home

MEN AND WOMEN, 18 TO 60. Swedish Massage graduates make big money working full or spare time with doctors or in hospitals, health resorts, sanatoriums, clubs, private practice. A dignified interesting career! Qualify for your graduation certificate. Thorough instruction at home as in class rooms. Write for Illustrated Book—FREE!

The College of Swedish Massage
Dept. 295-M, 41 E. Pearson, Chicago 11

LAW

STUDY AT HOME for Business Success and LARGER PERSONAL EARNINGS, 43 years expert instruction—over 114,000 students enrolled. LL.B. Degree awarded. All text material furnished. Easy payment plan. Send for FREE BOOK—"Law and Executive Guidance"—NOW!

AMERICAN EXTENSION SCHOOL OF LAW
Dept. B-55, 646 N. Michigan Ave., Chicago 11, Illinois

Store Route Plan PAYS BIG MONEY

SELL COUNTER CARD PRODUCTS

Build a good-paying business of your own. Call on retailers of all kinds; supply nationally advertised Aspirin, Cosmetics, Razor Blades and 200 other necessities. Big values at 5c and 10c to $1. High quality. Attractive displays sell fast. Free book of facts. Write!
World's Products Co., Dept. 69-P, Spencer, Ind.

open in any given office 'but you might try Mr. Jones's office down the hall six doors.' You may trudge from the ticket office to the accounting office to the superintendent's office to the yardmaster's—but why go on? Just about everybody who has ever looked for a job, especially on the railroad, has had a similar experience.

"The Railroad Retirement Board does give material assistance. I advise jobseekers to visit the Board's local office first. Till such time as the companies themselves see the advantages of a centralized employment office, like the centralized ticket office, the Board is the best bet."

"Mr. Clutter suggests that the roads give vocational and aptitude tests in picking employes for key jobs. May I amend that to read 'employes for *all* jobs'? I know of college-trained men who've had to work with the track gang, while some not-too-high-grade morons were decorating swivel chairs."

D. F. Arthur also takes the employes' viewpoint. He's an ex-shopman and trainman living at 670 Fulton Ave., Sacramento 19, Calif.

"The main fault lies with a group of little men occupying big chairs," he argues, "men who have king complexes in railroad financial departments. With such men fighting for power, the executive divisions must obey directions and pass them on to the operating officials and eventually to the rank and file.

"It is my opinion that almost any progressive suggestion offered by a minor employe would be turned down, although it may be based upon actual experience with the job. There is little incentive today offered to the rank and file, because of the attitude of the financial brass hats. What opportunity does a shopman, for example, have to develop a patent?"

* * *

FRANK JAY GOULD, grandson of the late Jay Gould, 19th Century railroad magnate, reported to the police at Juanles-Pins, France, the theft of $289,000 in

NOW, the pipe smoker's dream come true!

Every Pipefull Proves . . .

DR. PHILIP'S PIPE IS THE BEST!

The ideal pipe for the STEADY SMOKER, the NEW SMOKER and the man who doesn't like an ordinary pipe.

- NO BREAKING IN!
- READY-MADE CAKE!
- DOUBLE COOLING ACTION!
- CANNOT BURN THROUGH!
- FEATHER-WEIGHT!
- FLAT BASE, WILL NOT TIP!
- FINEST QUALITY IMPORTED BRIAR!
- INTERCHANGEABLE CERAMIC FILTER BOWLS!

This cross section shows the interchangeable inner ceramic bowl which burns tobacco dry, cool and clean. The bowl acts as a non-burning sponge that absorbs all of the tar and most of the nicotine. The metal radiator ring on top of the Dr. Philip's pipe is the only part that can get hot. It takes the heat from the ceramic and gives it off to the air FAST. The smoke circulates in the space between the inner bowl and the outer briar shell, becoming COOL before you draw it. Your tobacco cannot get wet because cotton or paper tissue packed in the space below the inner bowl absorbs all of the saliva and condensation. Rotate the ceramic bowls over and over again as you would a set of ordinary pipes. Dr. PHILIP'S pipe is EASY to CLEAN. There is no need to knock this pipe against any object to get out the ash. It does not form a cake. There is no need to rest the Dr. PHILIP'S pipe for cooling or drying. It has a constant capacity. The SHORT SMOKE MODEL will hold enough tobacco for a pleasure packed smoke of 15 to 25 minutes and the LONG SMOKE MODEL will last from 45 minutes to a full hour!

THE LONGER LASTING PIPE—YOU GET 4 EXTRA BOWLS!

SHORT SMOKE MODEL
Including 4 EXTRA BOWLS **only $4.50**

LONG SMOKE MODEL
Including 4 EXTRA BOWLS **only $5.50**

If not satisfied that this is the most amazing pipe you have ever owned, return within ten days and your money will be refunded!

QUALITY AGENCY
214 East 49th Street
New York 17, New York

Please send me postpaid.....DR. PHILIP'S pipe(s). I enclose $..... to cover the cost of the pipe(s) I have checked below.

☐ SHORT SMOKE MODEL including 4 EXTRA BOWLS @ $4.50
☐ LONG SMOKE MODEL including 4 EXTRA BOWLS @ $5.50

NAME .....

ADDRESS .....

CITY ..... ZONE.... STATE.....
(Sorry, no C.O.D.'s) 10-52

LAW NIGHTS AT HOME! L.L.B. DEGREE

Legally trained men win higher positions and bigger success in business and public life. Greater opportunities now than ever before. **More Ability: More Prestige: More Money** We guide you step by step. You can train at home during spare time. Degree of LL.B. We furnish all text material, including 14-volume Law Library. Low cost, easy terms. Get our valuable 48-page "Law Training for Leadership" and "Evidence" books FREE. Send NOW.
LASALLE EXTENSION UNIVERSITY, 417 South Dearborn Street
A Correspondence Institution Dept. 10334L Chicago 5, Ill.

Learn to **MOUNT BIRDS**

Tan SKINS, make up FURS

Be a Taxidermist. *Double your hunting fun.* We teach you at **Home.** Mount **Birds, Animals, Fish, Heads,** common specimens. **Fun and profits.** Decorate home and den **MAKE MONEY.** Mount game, tan for others. Big profits in spare time. **WRITE TODAY.**
100 game pictures in FREE BOOK
Hunters, get your copy. It's **Now Free.** Send post card. State your **AGE.**
FREE BOOK NORTHWESTERN SCHOOL OF TAXIDERMY
Dept. 4210 Omaha, Nebraska

Learn BAKING At Home

Baking is one of America's high industries in wages. Nearly depression-proof. Thorough basic home course lays sound foundation. If you have aptitude, write for FREE BOOKLET, "Opportunities in Commercial Baking."
National Baking School, 835 Diversey Pkwy, Dept. 1937, Chicago 14

HOW TO COURT A GIRL SUCCESSFULLY

5,000 word booklet of hints on dating, grooming, letter writing and the age old question, "What age to marry". For Men and Women. Send 25c in coin in plain wrapper or envelope to:
DORIS RAY
4207 W. Crystal Street Chicago 51, Illinois

Learn PHOTOGRAPHY at Home

Splendid opportunities. Prepare in spare time. Practical basic training. Long-established school. Send for free book, "Opportunities in Photography." No obligation. American School of Photography, 835 Diversey Pkwy., Dept. 1417, Chicago 14, Ill.

FREE SAMPLE LESSON **WATCHMAKING**

CHICAGO SCHOOL OF WATCHMAKING
1608 Milwaukee, Dept. 8102, Chicago 47, Ill.
Show me without obligation how I can learn watch repairing at home. Rush free sample.
Name .....
Address .....
City ..... Z..... State.....

POKER CHECKS

Famous Hub Checks, Non-Duplicate, Square Edge, Heaviest Game Check, Cut and Stack Accurately. Supplied in any color.

FREE CATALOG Expose: The Open Book, Sealed Book, Scientific Betting, Master Key System, How to Control Fair Dice, Runup System, Plastic Playing Cards for Club Use.
"The Old Reliable"
K. C. CARD Co., 806 S. Wabash, Chicago 5

cash and negotiable bonds from his hotel-office. The burglar cut a pane of glass in a door to gain access to the office of one of the two hotels operated by Mr. Gould, who has been living in France for many years with his wife.

* * *

WESTERN MARYLAND RY., celebrating its 100th birthday this year, calls attention to the legend that Lincoln's Gettysburg address was written while the President was traveling to the battleground over the Hanover Branch RR., which later became part of the Western Maryland.

* * *

AN ENGLISHWOMAN, Mrs. C. Plummer, wife of the railway stationmaster at Tidworth, North Andover, Hants, England, writes: "My young son, Raymond, is lying on the grass completely engrossed in your delightful *Railroad Magazine*. As a railway fan, he reads railway literature from all over the world when he can get it. It's a grand life being married to a railway man—never a dull moment. Tidworth is a lovely section. We would welcome any North American railroader who cares to visit us at our home in the station here, and would welcome news from any of you. Many Americans in the armed forces were stationed here during World War II. I was thrilled to see Mrs. Eleanor Roosevelt at the unveiling of a memorial to her husband in Grovesnor Square."

* * *

A PERFECT across-the-board "on time" record was chalked up the other day by New York Central's through passenger fleet—a record that any operating department would be proud of. As a result, smiles lit up the faces of dispatchers, tower men, train crews and officials. The achievement is especially memorable when you consider it was scored by one of the country's biggest and therefore most complicated passenger fleets.

$1.00

YOUR CHOICE OF TWO GREAT BOOKS

DEAD OF NIGHT by Stewart Sterling
(Published at $2.50)

Gil Vine, the house detective with the fanciest title in the business, is really earning his salary these days. The unknown beauty, Teresa Marino, is enough to cause an epidemic of loss of sleep in her own right; when her true identity becomes known, it is evident that big things are at stake. Radio and Advertising V.I.P.s who must be handled with the utmost delicacy becomes involved in an unsavory murder which challenges the talents both mental and physical of Gil Vine who, while a great respecter of persons wasn't made security chief for his good looks alone.
Gil Vine's investigation ranges over the length and breadth of Manhattan, with side trips to Lexington, Kentucky and Long Island, to gather evidence, and to round up suspects.
DEAD OF NIGHT is sophisticated, exciting and murderous. And you get Gil Vine, too!

OR

THE MIRACLE OF THE BELLS by Russell Janney
(Published at $3.00)

Eddie Cantor says:
"THE MIRACLE OF THE BELLS is more than a book. It's show business—it's entertaining—it's good Americanism. I defy you to read THE MIRACLE OF THE BELLS and not become a better person."
Kate Smith says:
"I'll guarantee once you've read a few pages of THE MIRACLE OF THE BELLS you'll be unable to put it down . . . it's a love story, first of all . . . an up-to-date tale of Hollywood and movies . . . a dramatic, exciting chronicle of faith in Good.
"A book which achieves remarkable power. Once you pick it up and become immersed in its story it is almost impossible to put it down. I recommend that you read it—you will anyhow."
—Albert E. Idell, Philadelphia Inquirer

You can have either one of these books for only $1.00—over 60% less than the regular published price—by joining the MEN'S DOLLAR BOOK GUILD.

MEN'S DOLLAR BOOK GUILD

Yes- Only one dollar will bring you either one of these truly great stories for men.

Note: You are not obligated, as in the case of many book clubs, to buy three, four, or six additional books! This is a special introductory, one-time offer, good only while our limited supplies last. At no cost or obligation to you, also, your name will be added to the list of the MEN'S DOLLAR BOOK GUILD and you will receive special notifications sent out on forthcoming book bargains. This service is entirely free and will not obligate you in any way. Send $1.00 for one book or $2.00 for both. NOW, before our supply is exhausted. **FILL IN THE COUPON TODAY!**

MEN'S DOLLAR BOOK GUILD
Suite 2005, Dept. D
205 E. 42nd St., New York 17, N. Y.

Enclosed please find ($1.00 ☐) ($2.00 ☐). Please send me:

☐ DEAD OF NIGHT (Published at $2.50)
☐ THE MIRACLE OF THE BELLS (Published at $3.00)

This does not obligate me in any way to buy further books.

Name .....

Street and Number .....

City ..... Zone..... State.....

CHRONOGRAPH
DON'T RISK A RED CENT WITH
10 DAY FREE TRIAL
MEASURES DISTANCE
TELLS TIME
IT'S A
STOP WATCH!
• Antimagnetic • Sweep Second Hand • Swiss Made • Precision Jeweled • Shock Resistant • Expansion Band • Black or White Luminous Dial • Unbreakable Crystal.
SNAKE EXPANSION BAND
Measure speed and distance! Stainless Steel Case! Ideal for all active men!
FULLY GUARANTEED
SEND NO MONEY
Pay postman $7.95 plus 10% tax or mail only $8.75 and save postage.
$7.95
IRA SALES Dept. 72
5684 West Fort Street
Detroit 9, Michigan

be an invisible reweaver
MAKE BIG MONEY AT HOME
before
after
Profitable hobby and trade—earn over $20 daily full or part time—repair cuts, tears, rips, burns in clothing or any fabric so hole can't be seen. Big profit, big demand—uncrowded field. Low-cost home-study course includes lifetime equipment. Easy-to-learn, pay-as-you-earn. Income all your life. Details free. Send postcard today.
FABRICON CO. Dept. D
8342 S. Prairie Avenue, Chicago 19, Illinois

EAR ACHE?
DENT'S
EAR WAX DROPS for fast temporary relief of accumulated wax condition
TOOTHACHE?
ask your druggist for DENT'S TOOTH GUM, TOOTH DROPS or POULTICE

High School Course
at Home
Many Finish in 2 Years
Go as rapidly as your time and abilities permit. Course equivalent to resident school work — prepares for college entrance exams. Standard H. S. texts supplied. Diploma. Credit for H. S. subjects already completed. Single subjects if desired. High school education is very important for advancement in business and industry and socially. Don't be handicapped all your life. Be a High School graduate. Start your training now. Free Bulletin on request. No obligation.
American School, Dept. H-749, Drexel at 58th, Chicago 37

MAKE EXTRA MONEY
EVERY BUSINESS EVERYWHERE USES UNION LABEL BOOK MATCHES
No experience needed to earn big daily commissions. Be a direct factory representative of the world's largest exclusive UNION LABEL Book Match manufacturer. Prospects everywhere. Feature Glamour Girls, Hillbillies, scenics and dozens of other styles — Double Books — Jumbo Books — nearly 100 color combinations. New, bigger portfolio makes this fastest selling line a real profit maker for you. Write TODAY for full details.
REGULAR
DOUBLE AD DISPLAY
JUMBO
SUPERIOR MATCH CO.
Dpt. S-1052, 7528 S. Greenwood Ave., Chicago 19, Ill.
West Coast Salesmen, write Box 1087, San Jose, Calif.

LAST STOP is the Reader's Choice Coupon (page 140) which guides your editorial crew in selecting material for future issues of *Railroad Magazine*. Results of balloting on the August issue show as follows:

1. Montreal, Railroad Metropolis, *Hastings*
2. Kentucky Hospitality, *Stacy*
3. Carbarn Comment, *Maguire*
4. On the Spot
5. Information Booth, *Comstock*
6. New Orleans Streetcar Blues, *Maguire*
7. Kid Switchman, *Roach*
8. Locos of the Atlanta & St. Andrews Bay
9. Dear Mister Thornwhistle, *Wingo*

Best photos: pages 62 and 23

BETWEEN HEAVEN AND EARTH, passengers of elevated railway of Bad Reichenhall, Germany are treated to magnificent and unique view of surrounding landscape. The railway transports visitors to various parts of this summer resort

Authenticated News

Those Surprising Trips

H. REID

PHOTOGRAPHIC TRIPS are like blind dates— you never know what to expect.

For years, A. A. Thieme and I have been surprised, annoyed and bewildered, but always satisfied with our two-week summer jaunts.

It's then we load the Ford with a dozen still cameras, complete processing equipment, numerous cartons of film, three movie cameras, two tape recorders and assorted other gear. If there's any more room—clothing and personal essentials.

From then on, we reconnoiter for action pictures and whistle recordings in spots as remote as we can find.

For what happens, the following vignettes are typical:

A PAIR of Roanoke patrolmen thought they had something. I thought so, too, but I couldn't figure out what, as I had restrained the Ford to 14½ miles an hour ever since the police car trailed us from the N&W's Sheaffer's Crossing. A blast of a siren clued us to tarry by the curb. I still didn't get it: We weren't speeding, we were poor doubles for dangerous characters and the Ford was no ringer for a gangster car. Moreover, our cameras and jugs of hypo clearly established our intent. Well, perhaps not too clearly. "Just as I thought," chortled one patrolman as he fondled oue of the demijohns. He grimaced as he sniffed. "You mean you drink this stuff?" he ventured. And as we assured him, "No—that's a photographic solution," we caught the pitch of their interest in halting white lightning traffic. With no more ado, we continued our teetotaling way to the Virginian yards.

The Dark Continents of Your Mind

DO YOU struggle for balance? Are you forever trying to maintain *energy, enthusiasm,* and the *will to do?* Do your personality and power of accomplishment ebb and flow—like a stream controlled by some unseen valve? Deep within you are minute organisms. From their function spring your emotions. They govern your *creative ideas* and *moods*—yes, even your enjoyment of life. Once they were thought to be the mysterious seat of the soul—and to be left unexplored. Now cast aside superstition and learn to direct intelligently these *powers of self.*

Accept this *Free* Book

Let the Rosicrucians, an age-old fraternity of thinking men and women (not a religion), point out how you may fashion life as you want it—by making the fullest use of these little-understood *natural faculties* which you possess. This is a challenge to make the most of your heritage as a human. Write for the Free Book, "The Mastery of Life." Address: Scribe I.R.A.

***The* ROSICRUCIANS**

San Jose (AMORC) California

DO YOU HAVE PROSTATE TROUBLE?

General Weakness, Backache, Frequency, Burning Urination, Kidney and Bladder Distress.

The Kansas City Medical Press has just published a revealing booklet which discusses the PROSTATE GLAND in language anyone can understand. Information contained in this book may save you years of suffering. Give name and address.

MAIL COUPON TODAY

K. C. Medical Press
Dept. T-1, 1440 E. 21st,
North Kansas City, Mo.

Please send me by return mail booklets I have checked below.

☐ The Prostate Gland
☐ Kidney and Bladder
☐ Arthritis
☐ Rupture

Please enclose 10c for each book ordered.

STOP TOBACCO

Banish the craving for tobacco as thousands have with Tobacco Redeemer. Write Today for free booklet telling of injurious effect of tobacco and of a treatment which has relieved over 300,000 people.

In Business Since 1909

FREE BOOK

THE NEWELL COMPANY
324 Clayton Sta. • St. Louis 5, Mo.

MAKE QUICK EASY CASH! FREE SAMPLES

SELL Empire CHRISTMAS CARDS

50 NAME PRINTED CARDS $1.25

Stationery Napkins

Big new line—quick PROFIT makers. Gorgeous 21 card $1 Christmas and All-Occasion Assortments. Metallic, comic cards. FREE Catalog. 5 NEW Christmas Card name-printed lines $1 up. Children's books. Scented stationery. NO EXPERIENCE NEEDED—Costs nothing to try. Fund-raising plan for clubs. Write today: FREE IMPRINT SAMPLES, Box Assortments on approval.

100% Cash Profit!

EMPIRE CARD CO., 302 FOX ST., ELMIRA, N. Y.

SEND FOR THIS FREE!

Make money. Know how to break and train horses. *Write today for this book FREE*, together with special offer of a course in Animal Breeding. If you are interested in Gaiting and Riding the saddle horse, check here ( ) *Do it today—now.*

BERRY SCHOOL OF HORSEMANSHIP
Dept. 8410 Pleasant Hill, Ohio

New Relief for the Misery of PSORIASIS

Now you can get relief. V. S. says, "Before using Soriasin, I had large masses of scales for 3 years. I tried everything. Then my first bottle of Soriasin did wonders. I am half way through my second bottle and my skin looks like any normal, healthy skin." New Soriasin softens and removes crusts and scales and aids in healing skin lesions and itching. Definite relief is guaranteed in two weeks or your money refunded. Soriasin is easy to apply—comforting, non-staining. ONLY Soriasin has a new pleasant cosmetic fragrance. It is the FIRST to contain an effective blanching agent which goes to work at once on ugly lesions after scales are removed. Send 25c for trial size bottle—or write today for free information and helpful facts.

SOUTHERN PHARMACAL CORP.
Suite 610, 1419 H St., N.W., Wash. 5, D.C.

WE EDGED the Ford cautiously down a curving, dirt road the first time we ferreted out Norfolk & Western's mixed train, the *Huckleberry*, at Merrimac, Va., A smudgy, outworn coal mining sector whose chief claim to existence on maps seems to be a crossing with the Virginian. Road—or trail—approaches left us wondering just where Merrimac would be. While we pondered, a maid of fair face and ample contour sidled down the lane. Thieme, desirous of rapid advances to whatever goal presented itself first, inquired in cavalier manner, "How far is it to Merrimac?" To which the sturdy damsel replied with minimum effort, "Not very." And sure enough, it wasn't—about a quarter of a mile. Our dealings with the *Huckleberry* were more leisurely, incidentally.

TOURIST CABINS, our preferred lodging on photograph journeys, frequently offer conveniences such as a garage for the Ford, a daily newspaper with

comics for Thieme and baseball scores for me, ice water—for cooling down photographic chemicals—and, above all, a private bathroom, which affords facilities for using those chemicals in developing film. The only hitch is contriving to make the room light-tight, which generally brings about this patter:

Cabin proprietor: "Now, here's a nice room with a lot of southside windows."

Thieme: "Got any with no windows?"

SHORTLINES are prime targets, but they can be frustrating. Back in the steam days on the Atlantic & Western, we submitted to a blistering Carolina sun while waiting for an expected freight from Sanford, N. C. As the better part of the morning slipped by, we decided to backtrack and see what the trouble might be. Explained an A&W trainman: "We ran a big train yesterday, we figured we'd skip today."

LEARN to DRAW for PLEASURE and PROFIT!

ARTISTS ARE IN DEMAND for T.V. ADVERTISING PUBLISHING DISPLAYS etc.

IT'S FUN! IT'S SO AMAZINGLY EASY with NEW

COMMERCIAL ART TECHNIQUES

by S. RALPH MAURELLO

COMPLETE SELF-INSTRUCTION COURSE WITH OVER 500 STEP-BY-STEP ILLUSTRATIONS OF LATEST PROCEDURES.

$1.00 paper bound

$3 cloth bound

START NOW ON A SUCCESSFUL AND PROFITABLE CAREER

Artists are in demand now for advertising agencies, publishing houses, displays and T.V. Enter this lucrative field NOW and command the high pay that many artists are earning. This practical, up-to-date book gives you all the essential information you need. Every technique explained step-by-step, plus valuable information on lettering, layout, type, design, reproduction, etc. 128 double size pages, with up to 1000 drawings and photos, clearly explained—easy to follow. Don't miss this golden opportunity to order the best book of its kind on commercial art.

There are hundreds of top paying positions open. You can be one of the fortunate ones if you act now. If you can hold a pencil you can draw [illegible] and earn big money too!

RUSH COUPON TODAY

QUALITY AGENCY, 214 E. 49th St., New York 17, N. Y.

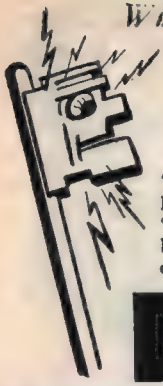
Please send ..... copies of COMMERCIAL ART TECHNIQUES ( ) at $1.00 ( ) at $3.00

NAME.....

ADDRESS.....

CITY..... STATE.....

( ) Enclosed check, cash, m.o., you pay postage.



When NERVOUS TENSION MAKES YOU ALL "KEYED-UP"

Take Miles Nervine to relax. See how it can soothe and comfort "jangled" nerves. Contains no Barbiturates. Follow the label. Avoid excessive use. At all drugstores.

MILES NERVINE

LAW FREE BOOK

Your FREE copy of "The Law-Trained Man" shows how to gain prestige and greater earnings through Blackstone home law study. All instruction material furnished including 16-volume Law Library written by 65 well-known law authorities. Lawyers, judges among our graduates. LL.B. degree. Low cost; easy terms. Write today.

BLACKSTONE COLLEGE OF LAW 225 N. Michigan Ave. Dept. 107, Chicago 1, Ill.
A Correspondence Institution Founded in 1890

START YOUR OWN BUSINESS

on credit. Your own boss. 1586 of our Dealers sold $5,000 to $27,500 in 1951. We supply stocks, equipment on credit. 200 home necessities. Sales experience unnecessary. Pleasant, profitable business backed by world wide industry. Write RAWLEIGH'S, DEPT. J-U-PBL, Freeport, Illinois.

★ SONG POEMS WANTED TO BE SET TO MUSIC

Submit one or more of your best poems for free examination. Any subject. Send poem. PHONOGRAPH RECORDS MADE. FIVE STAR MUSIC MASTERS, 620 BEACON BLDG., BOSTON 8, MASS.

How to Make Money with Simple Cartoons

A book everyone who likes to draw should have. It is free; no obligation. Simply address FREE BOOK

CARTOONISTS' EXCHANGE
Dept. 4810, Pleasant Hill, Ohio

MAKE all the MONEY YOU WANT — FAST!

Make up to $4.00 a pair selling exclusive Cushion Shoes

New 3-Sole style sensation! 2 Full Leather soles, hand hammered tap sole, heel-to-toe cushion, arch support. Fast sellers in dress, work, sport shoes. ONLY Cushioned Paratroop Boot. Big spare time income. No experience or investment needed. Samples to producers. Write NOW for FREE Outfit.

FREE OUTFIT PARAGON SHOE CO., 744 Columbus Ave., Boston, Mass.

NOSE TROUBLE? SINUS?

Here Is Quick Relief. Miracle CHLOROPHYLL Added

If your nose feels stuffy, drains excessive mucus constantly, brings on headaches, pains around the eyes, hawking with annoying mucus dripping down your throat, here is quick, blessed relief in a matter of minutes, with amazing, new WEL-NOZE NASAL RINSE, with pure Chlorophyll added, which kills unpleasant nasal odor. The very first time you use WEL-NOZE your nasal passages open up, mucus goes in a hurry, and cooling, soothing, miracle-like relief is yours, and your breath is pure. And so quick too. You feel like living again! Send only $1.00 for generous supply. (3 for 2.50) No C.O.D. please. Satisfaction Guaranteed or your money refunded. Act now! Send for WEL-NOZE with Miracle Chlorophyll added, today, for speedy relief. DORENE CO., Dept. PF-10, Box 795, Chicago 90, Ill.

EVEN WHEN the Clinchfield ran a daily passenger train, few could nourish a justifiable respect for its punctuality. One summer day, we had doubts of the train running at all. We'd walked about seven miles from Erwin, Tenn., to a choice scenic location, only to wait until dark for the belated train. Beside the track, an urchin pilfering apples from a laden tree prudently advised us, "Hit am a mite late."

Reader's Choice Coupon

Stories, features and departments I liked best in the October issue are:

1. .....
2. .....
3. .....
4. .....
5. .....
6. .....

Best photo on page

Name .....

Occupation .....

Address .....

Is stamped envelope enclosed for Camera Club pin and membership card?.....
Railroad Magazine, 205 East 42nd Street, New York City 17.

ITEMS sent to the *Switch List* and *Model Trading Post* are published free, in good faith, but without guarantee. Write plainly and keep 'em short. Print name and address.

Because of time needed to edit, print and distribute this magazine, all material should reach the Editor nine weeks before publication date. Redball handling is given to items we get the first week of each month, if accompanied by latest Reader's Choice Coupon (clipped from above or homemade).

Use these abbreviations: *photo,* photograph; *cond.,* condition; *ea.,* each; *elec.,* electric; *env.,* envelope; *eqpmt.,* equipment; *esp.,* especially; *info.,* information; *n.g.,* narrow-gage; *negs.,* negatives; *p.c.,* postcard; *pref.,* preferably; *tr.,* train.

Do not use the term *pix* interchangeably for photos and drawings. Specify *photo* or *drawing*.

The term *tts.* refers to public timetables, unless preceded by *emp.*, when it means employe's (operating) timetables.

(R) indicates desire to buy, swap or sell back issues of *Railroad Magazine* or its predecessors, *Railroad Man's Magazine* or *Railroad Stories*. (Specify condition of each copy.)

(*) indicates juicefan appeal.

SWITCH LIST

(R) CHARLES W. AVERY, 770 Lowell St., Dubuque, Iowa, will sell or trade *Railroad Magazines* for HO 2-rail model eqpmt., Dec., Mar., June '45; Mar. to June '46; Jan., Feb., Mar., June '47; Jan. to Nov. '48; Jan. to Apr., June, Oct. to Dec. '49; Apr. to Dec. '50; all '51; all good cond.

RALPH W. BAILEY, 69 N. 16th Ave., Beech Grove, Ind., will trade B&O, NYC (Big 4-D&E) emp. tts. for any offered.

(R) W. D. BARRY, SR., 5819 Grassmere Lane, Apt. 4, Dallas 5, Tex., will sell *Railroad Magazines* misc. '32 to date; railroadiana, photos, negs., old builders pictures, books, *Trains*, *Model Railroader*, emp. tts., tts., tr. ords., *Baldwin Loco*, emp. mags., etc. Up thru size 116, 20 for $1; p. c., 14 for $1; all plus postage. Send list of wants with stamp. Answers all mail.

O. H. BORSUM, 606 Day Av. S.W., Roanoke, Va., will sell to highest bidder compl. collec, 1100 RR passes, car negs., 1400 photos most size 116, or will sell negs. 25c ea. and prints 10c ea. Partial list for 15c in stamps.

RAY BURKHALTER, 509 N. Washington St., Watertown, Wis., wants corres. and addresses of other Wis. railfans; also photos and info. on Wis. rds., esp. Milw., C&NW.

GEORGE J. CAPDEVIELLE, 2608-64th Ave., Oakland 5, Calif., will sell size 616 photos SF, Southern Pac., Tonopah & Goldfield, Tonopah & Tidewater, Western Pac. List, sample 10c. Wants UP *Big Boy* negs., size 616.

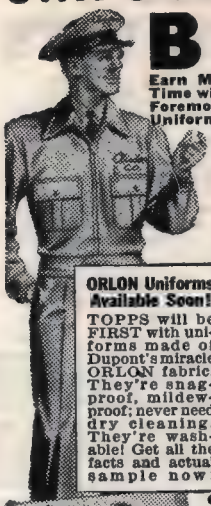
WM. CLYNES, 35 So. Emerson St., New Bedford, Mass., will buy '50 or '51 New Haven emp. tts., good cond. Also would like NH rulebook.

J. COOSHEK, 4418 Ontario St., Vancouver, B. C., Canada, wants emp. tts., annual passes of all abdn. and operating western and Canadian rds., esp. short lines. Has emp. tts., passes, Canadian and U. S., to trade or will buy.

HOGGER catches breath of sea air in Atlantic City, New Jersey. He's at the throttle of Pennsylvania's No. 1587, a 4-wheel switcher

Edward H. Weber, Chatham, N. J.

UNIFORMS SELL BIG!



Earn Money—Full or Spare Time with TOPPS—America's Foremost Line of Embroidered Uniforms and Work Clothes!

You need no experience, no special know-how to clean up big spare-time profits with TOPPS Uniforms and Work Clothes, embroidered to advertise. Prospects are everywhere—garages, service stations, factories, lumber yards, institutions, stores—they're all sold on the POWERFUL day-after day advertising employee uniforms give them. And they buy the TOPPS line after one look—for TOPPS offers the finest fabrics, expertly tailored for long wear and perfect fit—PLUS custom-made embroidery for any business! Yes, you'll take orders fast—and every one puts a big, spot-cash commission in your pocket. One Topps salesman made $800 profit on single sale.

ORLON Uniforms Available Soon!

TOPPS will be FIRST with uniforms made of Dupont's miracle ORLON fabric. They're snag-proof, mildew-proof; never need dry cleaning. They're washable! Get all the facts and actual sample now!

Mail Coupon for Free Outfit!

Everything you need to start making money at once is waiting for you FREE! The powerful, full-colored Topps Style Book, order forms, etc.—it's all yours for the asking. Just mail coupon below . . . and you're on your way to the biggest earnings of your life by return mail!

TOPPS, Dept. 7310, Rochester, Ind.

TOPPS, Dept. 7310, Rochester, Indiana
Please send me the FREE Topps Line by return mail.

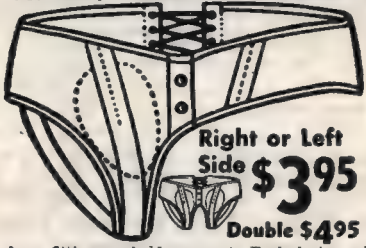
Name ..... Age.....
Address.....
City ..... State.....
Have You Ever Sold Before?.....
What Product?.....

AMAZING COMFORT — NO SPECIAL FITTING

RUPTURE-EASER

Reg. in U.S. Pat. Off. (A Piper Brace Product)

For MEN, WOMEN and CHILDREN



Right or Left Side $3.95

Double $4.95

A strong, form fitting washable support. Back lacing adjustable. Snaps up in front. Adjustable leg strap. Soft, flat groin pad. No steel or leather bands. Unexcelled for comfort. Also used as after operation support. Mail orders give measure around the lowest part of the abdomen and state right or left side or double. We Prepay Postage Except on C.O.D.'s.

Over 400,000 Satisfied Users! **10 Day Trial Offer**

Money-back guarantee if you don't get blessed relief

Delay may be serious—ORDER TODAY!

PIPER BRACE CO.

811 Wyandotte Dept. PFG-102 Kansas City 6, Mo.

EAT ANYTHING WITH FALSE TEETH

If you have trouble with plates that slip, rock and cause sore gums—try Brimms Plasti-Liner. One application makes plates fit *snugly without powder or paste,* because Brimms Plasti-Liner hardens permanently to your plate. It relines and refits loose plates in a way no powder or paste can do. Even on old rubber plates you get good results six months to a year or longer. **YOU CAN EAT ANYTHING!** Simply lay soft strip of Plasti-Liner on troublesome upper or lower. Bite and it molds perfectly. *Easy to use,* tasteless, odorless, harmless to you and your plates. Removable as directed. Plate cleaner included. Money back if not completely satisfied. If not available at your drug store, send $1.25 for reliner for 1 plate.

PLASTI-LINER INC., Buffalo 11, New. York — Dept. 76-B

BRIMMS PLASTI-LINER
THE PERMANENT DENTURE RELINER

Be an ARTIST Get FREE BOOK and TRIAL PLAN

You Can Draw at Home in Your Spare Time

For 38 years our graduates have enjoyed successful art careers. We can teach you to draw—no risk for you because TRIAL PLAN reveals your talent. Commercial Art, Designing, Cartooning all in one course. Get the facts in illustrated FREE BOOK, "Art for Pleasure & Profit." Write today. State age.

WASHINGTON SCHOOL OF ART
Studio 9910F Washington 5, D.C.

HYPNOTISM

Learn to apply this tremendous POWER. Develop will-power, self-confidence, self-control. ANYONE can master this exciting, profitable profession in short time by training at home, with GUARANTEED RESULTS. DON'T DELAY . . . Write to America's oldest Hypnotic school for free information now—today!

INSTITUTE OF APPLIED HYPNOLOGY
120 Central Park So., N. Y. 19, Dept. 6

TOMORROW—BOOM

TOMORROW? Your dreams of today—a puff of smoke?—or happy realities?
They will be what you make them. Thrill to the mystery of life's great adventure—MASTER IT. Dreams can be Willed into reality —This power is within YOU. Tap it and the world is yours. Write for free treatise—NOW—TODAY.

THE SEARCHERS
Guide 7, P.F. Florissant, Colorado

Re-Blue YOUR GUN

Instantly with one simple application of MINUTE-MAN GUN BLUE. No heating—can't injure steel. Send $ Your money back if not satisfied.

NEW METHOD MFG. CO.
PFG-70 Bradford, Pa. U.S. PAT. NO. 2,527,288

RUPTURED?

Get Relief This Proven Way

Why try to worry along with trusses that gouge your flesh—press heavily on hips and spine—enlarge opening—fail to hold rupture? You need the Cluthe. No leg-straps or cutting belts. Automatic adjustable pad holds at real opening—follows every body movement with instant increased support in case of strain. Cannot slip whether at work or play. Light. Waterproof. Can be worn in bath. Send for amazing FREE book, "Advice To Ruptured" and details of liberal truthful 60-day trial offer. Also endorsements from grateful users in your neighborhood. Write:
CLUTHE SONS, Dept. 15, Bloomfield, New Jersey.

RAILROAD CAMERA CLUB is open to all who collect railroad or streetcar pictures or other railroadiana such as timetables, passes, train orders, trolley transfers, magazines, books, etc. There are no fees, no dues.

Membership card and pin are given free to anyone sending us the latest Reader's Choice Coupon and self-addressed stamped envelope. If you don't want to clip page 140 make your own coupon. Address *Railroad Magazine*, 205 East 42nd Street, New York 17. Tell us what you want or what you offer; otherwise your name will not be printed here.

O. R. CUMMINGS, 23 Main St., Amesbury, Mass., wants Kodachrome slides of Liberty Bell Route of Lehigh Valley Transit Co.; also wants LVT interurban photos, showing 700, 800, 1000 class cars.

HERBERT DAMESMAN, 1725 W. Wisconsin Ave., you did not compl. your address.

M/SGT. G. S. DAWSON, Air Tng. Faculty Btry, 4051, ASU, Ft. Sill, Okla., will swap old and new books on steam locos, trs., old RR guides for relic guns and pistols.

(R) JOHN P. DeCAMP, 4040 Egbert Ave., Cincinnati 20, O., will sell *Railroad Magazines,* 14 misc., '35 to '48; rare copy of Kipling's *Plain Tales From the Hills* embossed on cover *Wagner Buffet Car Lib. No. 5;* make offer, good cond.

(R) JACK EMERICK, 200 So. Terrace, Boonton, N. J., will sell *Railroad Magazines;* emp. tts.; tr. ords.; annual passes; *Off. Guides,* June '50; photos, AT&SF, SP, UP, CRI&P, Milw., MoPac, PRR, B&O, Wab. Will sell or trade *Loco Catechism* for *The Lackawanna Story.* Wants photos DL&W, 4-6-2, 4-6-4, 4-8-0, 4-8-4; Ontario North and 4-8-4, LHR 4-8-2, RF&P 4-8-4, Southern 4-6-2.

ROBT. GARASHA, 4102 Argyle, Chicago 30, will sell or trade 50 ft. 8 mm. black and white movies elec. lines vicinity Chicago.

FRED HOEFLE, 4747 Green Glen, Cincinnati, O., wants Mar., Apr. '49 *Model Railroad Craftsman;* will pay 30c ea.; must be in good cond.

JACK HOLST, 823 E. 10th St., Bend, Ore., wishes to corres. with fans interested in logging rds. Will trade photos of *Shays,* rod engs. Wants builder's nos., info. on Live Oak, Perry & Gulf and Brooks-Scanlon.

JOHN C. ILLMAN, 522 Masonic Ave., Albany 6, Calif., will trade SP emp. tts., Sacramento Div. No. 180 and Coast Div. No. 160, both 9/30/51, for recent ones of other rds.

DR. JEROME A. KRONGOLD, 5643 Whitby Ave., Philadelphia 43, wants to exch. or buy 35 mm. color transparencies RR eqpmt. and terminals.

LEON LEVINE, 175 W. Tremont Ave., New York 53, N. Y., wants good photos or plans of NH, VGN, PRR, GN, or Milw. elec. locos; also n. g. elec. eqpmt.

JERRY T. McCARTHY, 348 16th St., San Bernardino, Calif., will sell Wisconsin Central switch key. Make offer. Wants Soo Line eng. photos, St. Point Div.

ROY McDOWELL, 3 Atkinson Court, Charlestown 2, W. Va., will sell C&O, Colorado RR size 116 p. c. photos.

(*) ROYAL C. MAIN, 2365 Pacific Blvd., San Diego 1, Calif., new fan, wants photos streetcars, interurbans, any issues *Trolley Sparks,* other juice info., data on Birney cars. Answers all mail.

L. D. MOORE, JR., 2102 Parker Ave., Portsmouth, Va., wants to buy size 616, 116 negs. or photos W&LE 0-6-0 engs. or any photos PRR 4-6-0, 0-6-0, 2-8-0 with new headlight position. Would like to contact persons having large PRR collec. all types. Has many photos to trade or sell. AT&SF, Frisco, Rock Island, N&W, VGN, NS, A&D, SAL, Soo. ACL, N&PBL.

(*) WM. OVERHOLSER, 537 Lyle Ave., Springfield, O., will buy photos streetcars and traction cars from Ohio elec. and E&LE; also photos city lines streetcars of Dayton, Columbus, Springfield, Cincinnati.

MAYER PEARLMAN, 141-11 78th Rd., Flushing 67, N. Y., will sell or trade photos many Eastern RRs. Send stamp for list and old M&U tkt.

(R) T/SGT. W. G. RATTLEY, USMC, MD, Naval Ordnance Plant, Indianapolis, Ind., will sell *Railroad Magazine* Dec. '29 to Dec. '39 compl., few covers missing, 3 copies slightly clipped, to highest bidder. Also some issues *Trains* prior to '47, *Loco Encyclopedia*.

(R) ARTHUR J. RICHARDS, 21 Briarfield Rd., Tyseley, Birmingham, England, wants photos American steam locos, all types, esp. 4-4-0, 4-4-2. Offers British Ry. tts.; rail, elec, tramcar tkts., British railroadiana. Wants corres.

(*) RICHARD S. SHORT, 226 Valley Rd., Merion Sta., Pa., offers new list size 616, 620, 122 interurban, streetcar photos, present and abdn. lines in East, Midwest, West. Also has list size 616, 122 steam photos, mostly B&O, L&N, N&W, PRR, Reading, VGN. List, sample 20c. Will also sell and trade size 616 negs.

(R) BEN SMITH, 265 Tompkins Ave., Brooklyn 16, N. Y., wants *Railroad Magazines* prior '34; *Model Railroader* Feb., Oct., Nov. '34; Sept. '35; *Trains* Mar., Aug., Sept. '41, Jan. '42. Has *Railroad Magazines* '36 to '50; *Model Railroaders* '38 to '51; *Trains* '42 to '51; *Model Builders* '37 to '49; *Model Makers* '24 to '41; toy train catalogs of *Ives, Lionel AF, Marklin* '16 to '50. Will sell or trade; state wants.

W. R. SWANSON, 5729 27th Ave. N.E., Seattle 5, Wash., has clear, sharp, size 116 negs. NP, Milw., GN, UP, Northwest shortlines and logging engs. to trade for steam negs. other rds. Wants to contact others interested in Northwest shortlines and loggers. Has data and rosters to trade.

(*) T. C. VAN DEGRIFT, JR., 1753 Hollywood Rd., Dearborn, Mich., wants photos DT&I 600 class *Atlantic* Locos; also 150 class *Consolidations*. Will buy or trade. Has DT&I, Detroit area juice photos.

(R) J. H. VANDERHOFF, 1355 So. 21 St., Ft. Dodge, Iowa, will sell *Railroad Magazines* May '44 to Dec. '49, good cond., $8 p. p.

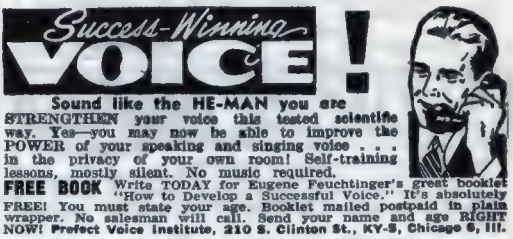
JOHN R. WAGNER, 22-09 Morlot Ave., Fairlawn, N. J., will buy any Erie, NYS&W, DL&W emp. tts., rulebooks, Off. Guide.

E. A. WEBB, 1705 Woodlawn Ave., Logansport, Ind., will sell size 116 photos Monon, PRR, Wab., 18 for $1 cash or money order; p. c. size PRR, IC, 14 for $1. Send 10c coin for sample, list. Has rosters var. rds. for sale, reasonable. Wants to buy p. c. negs. PRR, IC, GTW, C&O, Southern.

OTTO A. WEISS, 32-52 34th St., Long Island City 6, N. Y., wants RR pictures, all kinds; coal mine RRs, inside and outside views around mines; plan, info. how to build new RR New York City, 33rd St. to Danbury, Conn. over old roadbed New York, Westchester & Boston RR; also pictures.

DAN J. WENK, 1837 8th St., Alhambra, Calif., wants 1919 *Loco Dictionary & Cycl.*; also '22 *Car Builders Cycl.* State price, cond. Answers all mail.

E. A. WILHELM, 108 Jerome St., Texarkana, Tex., paralyzed rail, will sell *Trains* '50, '51, reasonable. Collects emp. tts., desires corres.


Success-Winning
VOICE!
Sound like the HE-MAN you are
STRENGTHEN your voice this tested scientific way. Yes—you may now be able to improve the POWER of your speaking and singing voice . . . in the privacy of your own room! Self-training lessons, mostly silent. No music required.
FREE BOOK Write TODAY for Eugene Feuchtinger's great booklet "How to Develop a Successful Voice." It's absolutely FREE! You must state your age. Booklet mailed postpaid in plain wrapper. No salesman will call. Send your name and age RIGHT NOW! Prefect Voice Institute, 210 S. Clinton St., KY-8, Chicago 6, Ill.

Special Offer
WORK CLOTHES BARGAINS!
FREE 10 DAY TRIAL
WORK SHIRTS
79c
3 for $2.29
Blue, Tan, White
Measure Neck & Arm
WORK PANTS
99c
3 for 2.69
Blue, Tan, White
Measure Waist & Leg
SHOP COATS
$1.79
3 for $5
Blue, Tan, White
Send Chest Measure
COVER ALLS
$1.98
3 for $5.49
Blue, Tan, White
Send Chest Measure
WHAT A BUY! Surplus stock from a big midwest supply firm makes these gigantic savings available to you! Sturdy, serviceable work clothes, though used, have been washed, thoroughly sterilized and reconditioned. Every garment made of long-wearing wash materials, strongly sewn, with reinforced stitching at points of strain. When ordering please state measurements under item.
SEND NO MONEY! Just send name, complete address, clothing desired (state how many of each), and your color choice (also 2nd color choice). We will ship immediately. Pay postman, plus postage when your order arrives. Or, enclose cash, check or money order, and We Pay Postage. Keep 10 days. Return for full refund of purchase price if not completely satisfied. Order TODAY at our risk!
YOUNG DISTRIBUTING CO. Dept. 474 2605 Elmhurst, Detroit 6, Mich.

MAKE EXTRA MONEY
PLASTICS
LEARN AT HOME

LEARN HOW TO MAKE fast-selling PLASTIC NOVELTIES FURNITURE JEWELRY SIGNS TOYS LAMPS

There are RICH OPPORTUNITIES for MEN and WOMEN with "know-how" in Plastics. Interstate's new Plastics course tells and shows how to make hundreds of fast selling items out of Plastics. Gives complete training in fabrication, casting, lamination, molding, internal carving, etc., in simple, easy, step-by-step language and pictures. Plastics and Fabricating Kits for 23 valuable Plastic items come with training at no extra cost. START A PLASTICS BUSINESS OF YOUR OWN. No other industry holds such promise for the future. You can make big money manufacturing novelties, toys, signs, etc., in your own home in spare or full time. Don't wait! Learn NOW how Interstate's Plastics Training qualifies you for success in the Plastics field.

PLASTICS AND SUPPLIES FURNISHED FOR 23 VALUABLE PROJECTS

INTERSTATE TRAINING SERVICE
Dept. C11K Portland 13, Oregon

FISHING TACKLE DIGEST

1952 ONLY $2.50 Beautiful illustrations of 32 fresh water and 40 salt water game fish with descriptions, habits, geographical distribution and complete standard and light tackle recommendations for all 72 game fish.

Jam-packed with articles and fishing tips by outstanding experts! Hundreds of illustrations of fly, bait casting, trolling, spinning and salt water tackle to help you catch more fish!

Improve your fishing! Send Cash, Check or Money Order to:

QUALITY AGENCY
214 East 49th Street New York 17, N. Y.

INVENTORS

If you believe that you have an invention, you should find out how to protect it. We are registered Patent Attorneys. Send for copy of our Patent Booklet "How to Protect Your Invention," and an "Invention Record" form. No obligation. They are yours for the asking.

McMORROW, BERMAN & DAVIDSON
Registered Patent Attorneys
150-F Victor Building Washington 1, D. C.

GLITTERING Christmas Cards
MAKE $50.00 (AND MORE) CASH

Personal Christmas Cards, Sparkle like Diamonds! Shimmering, Twinkling folders everyone will love. Show this new sensation to friends, neighbors. Extra Money! Christmas & Everyday Boxes. Name Imprinted cards, 50 for $1.25, up. FREE GLITTERING SAMPLES plus assortments on approval. WRITE TODAY . . .

FREE SAMPLES

CHAS. C. SCHWER CO., 81G Elm St., Westfield, Mass.

MAYBE THE STARS HAVE THE ANSWER YOU SEEK

If you wish an interpretation of the planets as they concern YOU and YOU only, send $1 with day, month, year of birth (hour if known).

JOHN R. HALL
MARSHALL, MISSOURI

If Ruptured

TRY THIS!...

If you can obtain relief by holding back your rupture or ruptures in this manner—I CAN HELP YOU! Write today for my valuable FREE information which is based on 23 years of practical experience.

FRED B. MILLER, Mfgr.
Dept. G, Hagerstown, Maryland

(R) RUDOLPH W. WITTEMANN III, 142 Henry St., Brooklyn 2, N. Y., has free list *Railroad Magazines; Trains; Model Craftsman; M. R. Track & Layout*, $1.50; *RR of A.*, $2.25; *Model Builders*, bound; *Ry. Age*, other railroadiana for sale or trade (pref.) for *Trains* '45 and prior; *Model Railroader* '47 and prior; *Model Craftsman*, some issues to date; list for p. c.

(R) TED G. WURM, 122 Monte Vista Ave., Oakland 11, Calif., is disposing of railroadiana collec., size 616 negs. Is still interested in *Railroad Man's Magazine* '29 to '31. Will sell Wilson's *History of PRR* in 2 vol., 1899, good cond. $35; *World Rys.* '51, new copy, $17.50; V&T '11 rulebook, new cond., $3.75; *Baldwin Records* in bound vols. of 10 ea., 2, 4, 5, excell. cond., $15 ea.; *Cable Car Carnival*, 1st edn., new copy $6; *Narrow Gauge Rys. in America*, brand new copy $4; *Log of the Cutty Sark* by Lubbock; worn copy $5; will send list of negs. on request, to be sold at auction. Also has Alco brass bldr. plate from WP 98, cleaned, $7.50 p. p.

(*) H. L. YOUNGER, 8822 Cynthia St., Los Angeles 46, sells good photos elec. cars, 3½x3½, 8 for 75c p. p., 16 for $1.50 p. p., no trade; no list. 3c stamps, cash or money order; state your choice. Has 3 LATL, 3 Okla. Ry., 22 Frisco Mun., 2 Key System, 3 Calif. Cable RR, 5 Dallas City, 15 Tex. Elec. Ry., 7 San Diego. List, sample 10c.

MODEL TRADING POST

ALVIN BARNETT, c/o M. D. Friedman Co., Box 409, Portsmouth, O., has 36 loco bells for sale or trade.

E. E. DAWSON, Box 42, Hico, Tex., has HO and *Lionel* std. gage eqpmt., one O gage *Lionel* articulated tr., to trade for old model guns.

GABE, Rte. 1, Box 295, you did not compl. your address.

DR. KOWAL, 1846 Cullerton, Chicago 8, wants any issue *Lionel* catalog prior '25; will buy or trade old toy trs.

FLOYD LEWIS, 21 Emerson Pl., Binghamton, N. Y., has *Lionel* tr. set, good cond.; will sell or trade for AF 3/16 S gage parts and eqpmt.

L. D. MOORE, JR., 2102 Parker Ave., Portsmouth, Va., would like to buy *AF* O gage B&O 4-6-2, or Pennsy K5 or *AF* 0-6-0, and *Buddy L* caboose.

ROSS E. MORRIS, 19 El Camino Real, Vallejo, Calif., will sell S gage *Super Scale* 1000 hp Diesel switcher body kit, $12. Will sell HO gage *Devore* couplers with draft gear, unassembled, 25c pr. Wants OO gage *Midlin* trk. and switches.

BEN SMITH, 265 Tompkins Ave., Brooklyn 16, N. Y., has std. gage engs., *Lionel; Ives; AF;* also O gage *Lionel;* streamliner; *Ives* O gage. Wants tr. catalogs prior '30; will trade.

F. W. TRITTENBACH, 661 Chestnut St., Emmaus, Pa., will sell 072 gage eqpmt. for best cash offer; *AF Hiawatha* tr. set incl. eng., tender, 2 coaches, observation car; fair cond., good running order; also 75 watt *AF* 7B transformer; new, perf. cond. Will sell as lot or train as unit and transformer alone.

FLAGSTOPS

EXCHANGE CLUB of Pittsfield is sponsoring 2nd annual old-fashioned excursion from Pittsfield, Mass. to Danbury (Conn.) Fair over New Haven RR on Oct. 5. Local stops, Pittsfield to Canaan, Conn. From Danbury to fairgrounds over frt. only tracks. Leave Pittsfield 9:15 a. m., arriving fairgrounds 11:45 a. m. Leave Fair at 5:10 p. m., reach Pittsfield 7:45 a. m. Lunch car, music and entertainment on train. Adults $4.50, children $2, incl. admission to Fair. Will again feature historic stop at famous old Glendale Sta. where service was discontinued 29 years ago. Museum pieces—one of first wood-burning locos on the NYNH&H, an old elec. loco, and a wooden, horsedrawn rail-car will be seen at the Fair. Details, tkts. from D. C. Exford, 74 North St., Pittsfield, Mass.

SAN DIEGO CHAPTER, NRHS invites railfans of the San Diego area to attend meetings, held on 2nd Sunday of Jan., May, Sept. For further info., write Eric Sanders, 7861 Normal Ave., La Mesa, Calif.

TROLLEY EXCURSION: Sept. 28, Boston, Mass. Metropolitan Transit Authority, 2-car train of new

picture window—air-conditioned PCC cars will cover trolley subways and lines running west from subway, incl. much private way. Trip includes visits to 3 carbarns. Leave Reservoir Car House 9 a.m. Fare: Women, children $2; others $3 on car, or $2.50 in advance. For tickets and info write: F. Forrest, 598 Franklin St., Cambridge 38, Mass.

CIRCLE TRIP over Western Maryland and B&O from Baltimore to Gettysburg and Hagerstown, Oct. 12. The route travels mostly over "freight only" lines, offers much of scenic and historic interest. Opportunity to tour Gettysburg Battlefield. Fare: $5.00 round trip, children: $2.50. For further info and tickets contact Lloyd's 2117 N. Charles Street, Baltimore 18, Md.

FALL FOLIAGE steam excursion, from Montreal to Huberdeau, Que. and return, Oct. 5. Sponsored by Canadian Railroad Hist. Assoc. Fare $4. For info and tickets write E. A. Toohey, 2368 Beaconsfield Ave., Montreal 28, Que.

FALL CONVENTION, Northeastern Region NMRA, Sept. 27 & 28, Plainfield, N.J. Hqts. Park Hotel. Host club, Summit-New Providence HO RR Club. Begins 1 p.m., Sat. with bus trip to O and HO club layouts and live steam Centerville and Southwestern. In eve. choice of model railroad auction, movies, classes on scenery, motive power and rolling stock etc. Business meeting on Sun.; model contest and 6-course dinner. Bring models, also anything you want auctioned. Package deal price: $6. Make reservations with Paul Mallery, Box 198, Murray Hill, N.J.

WASHINGTON CHAPTER, NRHS announces excursion to run from Washington, D.C. to Luray, Va., Oct. 5. Excursion will leave Washington Union Station at 8:15 a.m. via B&O, transferring to Norfolk & Western at Shenandoah Jct., W. Va. A lunch counter car and especially equipped baggage car for camera fans will be on train. Three hours will be allowed in Luray to visit the beautiful caverns, historical museum and special concert on the Luray carillon. A side trip to Shenandoah, Va. to see N&W yards. Fare: $5 incl. tax, children under 12: $2.50. Return to Washington about 6:15 p.m. For tickets write to Mr. Herbert L. Chase, 1615 Franklin St., NE, Washintgon 18, D.C.

SAVE UP TO 50% AND MORE

OUT OF PAWN

VALUES FROM $10 TO $10,000

GENUINE DIAMONDS

SAVE ON DIAMONDS FROM ESTATES, BANKS AND UNREDEEMED PLEDGES

TIME PAYMENTS ARRANGED

SEND FOR FREE CATALOG

All diamonds reset in brand new modern mountings. Sold with a written iron-clad money back guarantee. Over 100,000 satisfied customers have bought diamonds from Berman's.

Our reference—your own bank or any mercantile agency

Berman's Diamond Loan Bank

Dept. PF-BERMAN BLDG., BALTO. 1, MD.

FREE FOR ASTHMA

If you suffer with attacks of Asthma and choke and gasp for breath, if restful sleep is difficult because of the struggle to breathe, don't fail to send at once to the Frontier Asthma Company for a FREE trial of the FRONTIER ASTHMA MEDICINE, a preparation for temporary symptomatic relief of paroxysms of Bronchial Asthma. No matter where you live or whether you have faith in any medicine under the sun, send today for this free trial. It will cost you nothing.

FRONTIER ASTHMA CO. 160-T FRONTIER BLDG.
462 NIAGARA ST. BUFFALO 1, N. Y.

I Will Train You for Good Pay Jobs in RADIO-TELEVISION

You Learn at Home by Practicing with Kits I Send

Do you want a good pay job, a bright future, security? Want your own business? Then get into the fast growing RADIO-TELEVISION industry. Keep your job while learning. Hundreds I've trained are successful Radio-Television technicians. Learn Radio-Television principles from my illustrated lessons; get practical experience from kits sent.

I Trained These Men

"I received my License and worked on ships. Now with WEAN as control operator."—R. D. Arnold Rumford, R. I.

"4 months after enrolling, was able to service Radios. Averaged $10 to $15 a week spare time."—W. Weyde, Brooklyn, N. Y.

"Am doing Radio Servicing full time. Have my own shop. I owe my success to N.R.I."—Curtis Stath, Ft. Madison, Iowa.

EARN WHILE YOU LEARN

Many of my students make $5, $10 extra a week in spare time fixing neighbors' Radios. Mail coupon for actual lesson and 64-pg. book, "How to Be a Success in Radio-Television." J. E. Smith, Pres., National Radio Inst., Dept. 2KR1, Washington 9, D. C.

The ABC's of SERVICING

Good for Both—FREE

Mr. J. E. Smith, Pres., Dept. 2KR1
National Radio Institute, Washington 9, D.C.

Mail me Sample Lesson and Book FREE. (No salesman will call. Please write plainly.)

Name.....Age.....

Address.....

City.....Zone....State.....

AUTO SEAT COVER *Bargains*

BUY BY MAIL
Save UP TO 50%

It's the most amazing seat cover bargain in America! Complete protection for the upholstery of your car at a fraction of the prices you'd expect to pay. Our wholesale type merchandising that brings you these outstanding seat covers direct from the manufacturer through Young Products makes these unbelievable low prices possible. Act now. Order today by sending in the convenient coupon.

Red
Blue
or Green

COLORFUL PLASTIC

$1.98 FRONT SEAT ONLY

COMPLETE SETS for FRONT and REAR $3.89

FITS ALL CARS

Try Them

10 DAYS IN YOUR CAR AT OUR RISK!

Red
Blue
Green

SCOTCH PLAIDS $2.98 Front Only
Front & Rear.....$5

SIMULATED LEOPARD $2.98 Front Only
Front & Rear.....$5

LIFELIKE ZEBRA $3.69 Front Only
Front & Rear.....$6

WHAT A BUY! Now at last, you can have the smartest seat covers to protect your upholstery and add distinction to your car at sensational low prices. Tailored of miracle plastic in a CHOICE OF THREE LUSTROUS COLORS to blend or contrast with the color of your car. Or, if you prefer . . . choose from this grand variety of smart patterns. GAY SCOTCH PLAIDS in a dominating color of red, blue or green. . . LIFELIKE ZEBRA that can't be told from the actual animal skin. . . SIMULATED LEOPARD that will amaze you because of its lifelike appearance. Correct fit for your car in the cover of your choice! NEW SNAP-ON ACTION HOLDS THEM TIGHT. Colorfast . . . can't fade or shrink! WATERPROOF . . . STAINPROOF . . . GREASEPROOF! Resists burns. Cleans easily with a damp cloth. Use the handy coupon below to indicate the seat covers you want. Act now while offer lasts.

MAIL COUPON *Now* FOR 10 DAY *Free* TRIAL

Young Products
Dept. 470
2605 Elmhurst
Detroit 6, Mich.

Please rush the following seat covers to me:

- ☐ SOLID TONES
- ☐ SCOTCH PLAIDS
- ☐ LEOPARDS
- ☐ ZEBRAS

☐ Front Only ☐ Front and Rear

NAME .....

ADDRESS .....

CITY..... STATE.....

MAKE OF CAR

- ☐ 2-Door
- ☐ 4-Door
- ☐ Coupe

Other . . .

Color . . .

100% GUARANTEE
Your Money Promptly Refunded If You Are Not Delighted

☐ Send seat covers listed. I will pay postman plus postage.
☐ I want to save even more. Enclosed is full payment in cash, check or money order. I understand postage will be paid by Young Products.

FREE

STEERING WHEEL COVER WITH EACH ORDER

Included at no extra cost with your order for any of the seat covers listed above . . . a handy, attractive steering wheel cover that you'll be delighted to have on your car!

Limited Offer . . . Order Today

YOUNG PRODUCTS

Department 470
2605 ELMHURST AVENUE
DETROIT 6, MICH.

NEW BODIES FOR OLD!

I've Made New Men Out of Thousands of Other Fellows...

"Here's what I did for THOMAS MANFRE...and what I can do for you!"

—Charles Atlas

GIVE me a skinny, pepless, second-rate body—and I'll cram it so full of handsome, bulging new muscle that your friends will grow bug-eyed! . . . I'll wake up that sleeping energy of yours and make it hum like a high-powered motor! Man, you'll *feel* and *look* different! You'll begin to *LIVE!*

Let Me Make YOU a NEW MAN— IN JUST 15 MINUTES A DAY

You wouldn't believe it, but I myself used to be a 97-lb. weakling. Fellows called me "Skinny." Girls snickered and made fun of me behind my back. I was a flop. THEN I discovered my marvelous new muscle-building system—"*Dynamic Tension.*" And it turned me into such a *complete* specimen of MANHOOD that today I hold the title "THE WORLD'S MOST PERFECTLY DEVELOPED MAN."

ARE YOU
Skinny and run down?
Always tired?
Nervous?
Lacking in Confidence?
Constipated?
Suffering from bad breath?

What to Do About it
is told in my free book!

What is "Dynamic Tension"? How Does It Work?

When you look in the mirror and see a healthy, husky, strapping fellow smiling back at you — then you'll realize how fast "*Dynamic Tension*" GETS RESULTS!

"*Dynamic Tension*" is the easy, NATURAL method you can practice in the privacy of your own room—JUST 15 MINUTES EACH DAY — while your scrawny chest and shoulder muscles begin to swell, ripple . . . those spindly arms and legs of yours bulge . . . and your whole body starts to feel "alive," full of zip and go!

Atlas Championship Cup won by Thomas Manfre, one of Charles Atlas' pupils.

One Postage Stamp May Change Your Whole Life!

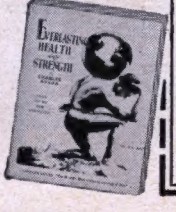
Sure, I gave Thomas Manfre (shown above) a NEW BODY. But he's just one of thousands. I'm steadily building broad-shouldered, dynamic MEN—day by day—the country over.

3,000,000 fellows, young and old have already gambled a postage stamp to ask for my FREE book. They wanted to read and see for themselves how I build up scrawny bodies, and how I pare down fat, flabby ones —how I turn them into human dynamos of pure MANPOWER.

FREE **My 32-Page Illustrated Book Is Yours Not for $1.00 or 10c — But FREE**

Send NOW for my famous book, "Everlasting Health and Strength." 32 pages, crammed with photographs and valuable advice. Shows what "Dynamic Tension" can do, answers many vital questions. Page by page it shows what I can do for YOU.

This book is a **real prize** for any fellow who wants a better build. Yet I'll send you a copy absolutely **FREE.** Just glancing through it may mean the turning point in your whole life! Rush the coupon to me personally: **Charles Atlas, Dept. 83X, 115 East 23rd St., New York 10, N. Y.**



CHARLES ATLAS, Dept. 83X,
115 East 23rd St., New York 10, N. Y.

Send me—absolutely FREE—a copy of your famous book, "Everlasting Health and Strength"—32 pages, crammed with actual photographs, answers to vital health questions, and valuable advice to every man who wants a better build. I understand this book is mine to keep, and sending for it does not obligate me in any way.

Name..... Age.....
(Please print or write plainly)

Address.....

City..... State.....

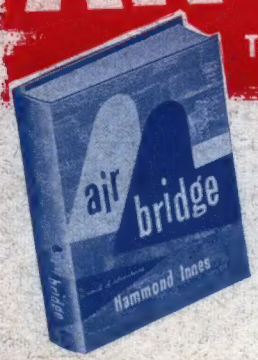
A SENSATIONAL BARGAIN FOR NEW MEMBERS OF THE ADVENTURE BOOK CLUB!

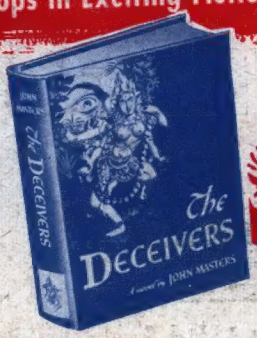
CHOOSE ANY 4 ADVENTURE HITS FOR $1!

when you join

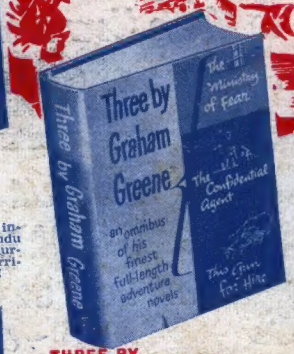
Full-Size, Hard-Bound Books!

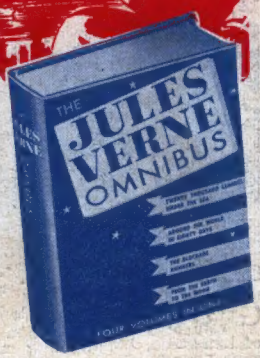
Tops in Exciting Fiction! Up to $11.00 Value!





New Best-Sellers! All-Time Favorites! "Big-Name" Authors!


Three by Graham Greene
an omnibus of his finest full-length adventure novels
The Ministry of Fear
The Confidential Agent
This Gun For Hire



AIR BRIDGE
Hammond Innes

Breakneck adventure against almost impossible odds behind the Iron Curtain in Germany. Thrilling dying story by the master of excitement and suspense.

THE DECEIVERS
John Masters

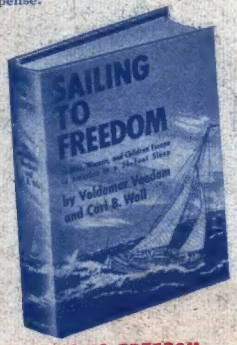
He dared death to uncover the infamous cult of Kali; the Hindu Destroyer-Goddess; practicing murder and robbery on the most terrifying scale in recorded history!

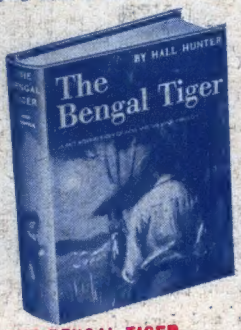
THREE BY GRAHAM GREENE

Three full-length thrillers in one book—the best of Graham Greene has ever written: **This Gun For Hire, The Confidential Agent,** and **The Ministry of Fear.** Over 500 pages!

THE JULES VERNE OMNIBUS

800 pages—4 complete novels! **20,000 Leagues Under the Sea, Around the World in 80 Days, The Blockade Runners,** and **From the Earth to the Moon.**



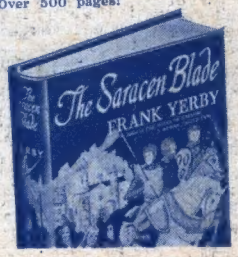


SAILING TO FREEDOM
Voldemar Veedam and Carl B. Wall

16 men, women, and children escape to America from the clutches of the N.K.V.D.—on a thirty-six foot, seventy-year old sloop!

THE BENGAL TIGER
Hall Hunter

Two men clash in deadly combat in the secret vault of a forbidden temple. Adventure in India's jungles, where beasts—and—men are hunted!



THE SARACEN BLADE
Frank Yerby

A peasant and an emperor storm their way together across the blazing world of the Crusades, from the palaces of Sicily to the deserts and harems of the East!

WHY WE OFFER THIS EXTRAORDINARY BARGAIN

IT'S to introduce you to the new kind of club for men you've always wanted! Each month the editors of the Adventure Book Club select the most exciting novels of adventure—action—suspense! These books sell for as much as $3.50 in the publishers' editions, but you get them for only $1 each plus a few cents shipping.

Relax the Way Famous Celebrities Do—with an Adventure Novel!

You get the headliners in adventure fiction—by the most famous authors—in variety to suit every taste for thrills! Frontier novels, stories of adventure in the arctic and in the jungle, spy thrillers, action on land and sea and in the air!

Take as Few as Four Books a Year!

You do not have to accept every selection—just **four** books a year from at least 24 books offered. After purchasing four books, at only $1 each, you can cancel your membership anytime!

Mail Coupon Now!

Receive at once any 4 adventure books on this page for only $1, plus shipping cost! When you get this big package of thrills, and realize it is just a **sample** of the treats in store for you, you will be delighted!

ADVENTURE BOOK CLUB, GARDEN CITY, NEW YORK

MAIL THIS COUPON

ADVENTURE BOOK CLUB
Dept. 10PFG, GARDEN CITY, NEW YORK

Please enroll me in the Adventure Book Club. Send me at once the 4 books checked below, and bill me **ONLY $1** FOR ALL 4, plus a few cents shipping cost.

☐ Air Bridge ☐ Bengal Tiger ☐ The Deceivers
☐ Jules Verne Omnibus ☐ Sailing To Freedom
☐ Saracen Blade ☐ Three by Graham Greene

I am to receive free the Club Bulletin, **Adventure Trails,** so I may decide in advance which future selections I want to accept. I need take only four books a year out of the 24 action novels offered, and I pay only the bargain price of $1 each, plus a few cents shipping cost, for books I accept. After accepting four books, I may cancel my membership at any time.

GUARANTEE: If not delighted, return all 4 introductory books in 7 days and membership will be cancelled.

Please Print

Name .....

Address .....

City & Zone ..... State .....

Same offer in Canada; address 105 Bond St., Toronto 2

OCT. 1952 RAILROAD MAGAZINE 35¢